Hafner, M. S.

Catalogue

1973 - 1975

#1 - #490 (76)

Calif.

Utah

Nevada

All "Tehachapi" project specimens catalogued @ UNM

Hafner, M.S.
1974

# Catalogue

2 mi. E. Searles Station, 9 mi. NNE Johannesburg, San Bernardino Co., California, 3200 ft.

16 February

1 ♀ *Onychomys torridus pulcher* 135-46-20-17=26.8
vag. closed, wear on nipples, lactating

2 ♀ *Dipodomys panamintinus mohavensis* 288-180-44-16=69.4
Vag. open. Emb. 2L-2R=7mm

5.5 mi. ~~ENE~~ (ENE) Johannesburg, San Bernardino Co., California, 3200 ft. [T29S, R41E, SE 1/4 sec 23]

17 February

3 ♀ *Pipistrellus hesperus hesperus*

Sand Canyon, 0.4 mi. N of Hwy. 58, 2.9 mi. EXS of Monolith, Kern Co., California, 3949 ft. [T32S, R34E, NW 1/4 sec 27]

18 July [all animals below killed and put-up 3 August]

| | | | | | |
|---|---|---|---|---|---|
| + chrom. (#5) | 4 | ♀ | *Dipodomys* — vag. closed, no emb., no scars | MSB 34906 | 254-146-42-15=[no wt.] |
| + baculum and soft ~~tissue~~ glans + chrom. (#3) | 5 | ♂ | *Dipodomys* — testes = 6 mm. abdom. | MSB 34907 | 265-163-44-15= " " |
| + chrom. (#6) | 6 | ♀ | *Dipodomys* — vag. closed, no emb., no scars | MSB 34908 | 250-146-40-14= " " |
| + baculum and ~~soft tissue~~ glans + chrom. (#7) | 7 | ♂ | *Dipodomys* — testes = 6 mm., abdom. | MSB 34909 | 265-154-45-16= " " |
| + chrom. (#21) | 8 | ♀ | *Dipodomys* — vag. closed, no emb., no scars | MSB 34910 | 279-168-45-16= " " |
| baculum and ~~soft tissue~~ glans + chrom. (#42) | 9 | ♂ | *Dipodomys* — testes = 6 mm., abdom. * | MSB 34935 | 268-161-43-15= " " |
| + chrom. (#12) | 10 | ♀ | *Dipodomys* — vag. open, no emb., no scars | MSB 34911 | 265-163-43-14= " " |

* M.S.H. 9 actually from nearby locality of: Sand Canyon, 0.1 mi. S. Hwy. 58, 3.1 mi. ESE Monolith, Kern Co., California, 3900 ft. [T32S, R34E, NW 1/4 sec. 27]

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All "Tehachapi Project" specimens catalogued @ UNM

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1974

# Catalogue

## Sand Canyon, 0.4 mi. N. of Hwy 58, 2.9 mi ExS of Monolith, Kern Co., California, 3949 ft. [T32S, R34E, NW1/4 sec27]

### 18 July (con't) [all animals below killed and put-up 3 August]

+chrom(#43) 11* ♀ Dipodomys — vag. closed, no emb, no scars — MSB 34936 — 270-166-41-14 = (no wt.)

+chrom(#39) 15* ♀ Dipodomys — vag. closed, plac. scars, 2L-2R — MSB 34937 — 264-150-41-14 = " "

+chrom(#17) 17 ♀ Dipodomys — vag. closed, plac. scars, 2L-3R — MSB 34912 — 260-145-42-13 = " "

+baculum +chrom.(#20) 19 ♂ Dipodomys — testes = 5 mm. abdom. — MSB 34913 — 247-151-41-12 = " "

+baculum +chrom(#16) 21 ♂ Dipodomys — testes = 5 mm. abdom. — MSB 34914 — 267-156-42-13 = " "

+baculum +chrom(#33) 22 ♂ Dipodomys — testes = 6 mm. abdom. — MSB 34915 — 282-164-43-13 = " "

+baculum +chrom(#11) 23 ♂ Dipodomys — testes = 5 mm. abdom. — MSB 34916 — 285-170-42-13 = " "

+baculum +chrom(#15) 25 ♂ Dipodomys — testes = 8 mm. ± scrotal (1 ± scrotal, 1 abdom) — MSB 34917 — 305-182-44-13 = " "

+baculum +chrom(#10) 28 ♂ Dipodomys — testes = 5 mm abdom. — MSB 34918 — 286-181-44-13 = " "

[* note: #11 and 15 from nearby locality of: Sand Canyon, 0.1 mi. S of Hwy 58, 3.1 mi. ESE of Monolith, Kern Co. Calif.]

## N. side Hwy 58, 6.8 mi. (by road) NW. of Mojave, Kern Co., California, 3700 ft. [T32S, R35E].

### 6 July

+chrom(#58) 12 ♀ Dipodomys — vag. ± open, no emb, no scars — MSB 34948 — put-up 3 august — 250-149-41-14 = (no wt.)

+baculum +chrom.#(57) 26 ♂ Dipodomys — testes = 7 mm. abdom. — MSB 34949 — put-up 3 august — 251-149-42-12 = " "

## Caliente Creek Wash, 0.3 mi. NE of Hwy 58, ~~5.4~~ 5.5 mi. ESE of Edison, Kern Co., California 760 ft. T30S, R30E, SW1/4 sec17

### 13 July

+chrom(#53) 13 ♀ Dipodomys — vag. open, no emb. plac. scars, 2L-1R — MSB 34886 — put-up 3 august, tail damage — 275-165-43-15 = [no wt.]

All "Tehachapi Project" specimens catalogued at UNM

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Caliente Creek Wash, 0.3 mi. NE of Hwy 58, 5.5 mi (by road) ESE of Edison, Kern Co. California, 760 ft, [T30S, R30E, SW¼ sec 17]

13 July (Con't)

+chrom (#55) 14 ♀ Dipodomys nitratoides — vag. open, swollen, no emb.!, no scars. — MSB34883 — put-up 3 August — 223-139-36-12

+chrom (#49) 16 ♀ Dipodomys — vag. open, no emb. no scars — MSB 34887 — put-up 3 August — 278-172-41-15

+chrom (#51) 18 ♀ Dipodomys — vag. open, swollen, no emb, no scars, uterus swollen — MSB 34888 — put-up 3 August — 285-171-41-15

+baculum +chrom. (#54) 20 ♂ Dipodomys nitratoides — testes = 7 mm. scrotal, epid. = 6 mm. tubules visib. — MSB 34884 — put-up 3 August — 237-146-37-11

+baculum +chrom (#50) 24 ♂ Dipodomys — testes = 10 mm 1 scrotal, 1 abdom. — MSB 34889 — put-up 3 August — 305-191-44-15

+baculum +chrom (#48) 27 ♂ Dipodomys — testes = 11 mm. scrotal. — MSB 34890 — put-up 3 August. — 270-159-42-14

0.9 mi. SE Keene, E. side Woodford-Tehachapi road, [T31S, R32E, NE¼ sec 28]

10 November

29 ♂ Microtus californicus — testes = (4, 8) 6 mm abdom. — 157-55-23-15 = 38.5

Sand Canyon, 0.4 mi. N of Hwy. 58, 2.9 mi. E X S of Monolith, Kern Co. California 3949 ft. [T32S, R34E, NW¼ sec 27]

10 November

skull only 30 ♀ Dipodomys — vag. closed — [died in Lab. 14 Nov. unknown causes] — tail damage — 252-126-45-17

skull only 31 ♂ Dipodomys — testes = 12 mm. scrotal epid. 3 mm. tubules visib. [died in Lab 14 Nov. cause unknown] — 273-144-43-17

skull only 32 ♂ Dipodomys — testes = 9 mm scrotal epid. = 13 mm [died in Lab. 19 Nov. unknown causes] — MSB 34987 — 281-165-42-14

skull only 33 ♀ Dipodomys — vag. closed — [died in Lab. 16 Nov. unknown causes] — [no measurements]

2 mi. E. Searles Station, 9 mi. NNE of Johannesburg San Bernardino Co. California, 3200 ft. "Camp I"

7 April

skull only 34 ♂ Dipodomys ~~panamintinus~~ mohavensis — testes = 12 ± abdom. epid = 20 mm. tub. visible — [died in lab. 11 April] — 289-179-43-13 = (no wt.)

Hayner, ms.
1974

Journal

## Exact Localities Used in Tehachapi Study

Locality "A" – 4.0 mi. N Mojave, Kern Co., California
3100', [T 32 S, R 35 E]

Locality "B" – N. side Hwy 58, 6.8 mi (by Road) NW
Mojave, Kern Co., California, 3700' [T 32 S, R 35 E]

Locality "C" – N and S sides of Hwy 58, 8.6 mi. (by road)
NW Mojave, Kern Co., California 3800'
[T 32 S, R 35 E, NE 1/4 sec 31]

Locality "D" – Cameron, S. side Hwy 58, 5.0 mi.
(by road) ESE Monolith, Kern Co.
California, 3800', T 32 S, R 34 E SE 1/4 sec 35]

Locality "E" – Caliente Creek Wash, 0.3 mi NE of Hwy 58, 5.5 mi.
(by road) ESE Edison, Kern Co., California, 760'
[T 30 S, R 30 E SW 1/4 sec 17]

Locality "F" – Sand Canyon, 0.1 mi. S. of Hwy 58, 3.1 mi.
ESE of Monolith, Kern Co. California, 3900'
[T 32 S, R 34 E, NW 1/4 sec 27']

Locality "G" – Sand Canyon, 0.4 mi. N. of Hwy 58, 2.9 mi.
EXS of Monolith, Kern Co. California 3949'
[T 32 S, R 34 E, NW 1/4 sec 27]

All "Tehachapi Project" specimens catalogued at UNM (MSB)

# Catalogue

Hafner, M.S.
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Note: The following specimens are from localities as per page 3A.

## 10 November

| Notes | No. | Sex | Specimen | Catalog | Locality | Measurements |
|---|---|---|---|---|---|---|
| +tissue, blood +baculum +chrom. | 35 | ♂ | testis = 8 mm. abdom. Dipodomys | MSB 34919 FC 2784 | G | [killed in lab. 6 Dec.] 275-155-41-15=[Nowt.] |
| +tissue, blood +chrom | 36 | ♀ | vag. closed, no emb., no scars, nulliparous Dipodomys | MSB 34920 FC 2785 | G | [" " " " "] 276-155-42-15 = " " |

## 18 July

[MSH 37-47 karyotyped 4 Aug 1974]

| Notes | No. | Sex | Specimen | Catalog | Locality | Measurements |
|---|---|---|---|---|---|---|
| +chrom #29 +tissue +baculum | 37 | ♂ | testes = 5 mm, abdom Dipodomys | MSB 34921 FC 2786 | G | 254-159-41-12 = " " |
| +chrom #24 " | 38 | ♂ | testes = 5 mm, abdom. Dipodomys | MSB 34922 FC 2787 | G | 249-152-42-12 = " " |
| +chrom #28 " | 39 | ♂ | testes = 5 mm., abdom. Dipodomys | MSB 34923 FC 2788 | G | 270-161-43-13 = " " |
| +chrom #31 " | 40 | ♂ | testes = 5 mm., abdom. Dipodomys | MSB 34924 FC 2789 | G | 274-174-42-13 = " " |
| +chrom # 8 " | 41 | ♂ | testes = 8 mm., abdom. Dipodomys | MSB 34925 FC 2790 | G | 261-152-43-14 = " " |
| +chrom # 34 " | 42 | ♂ | testes = 5 mm, abdom. Dipodomys | MSB 34926 FC 2791 | G | 251-154-41-13 = " " |
| +chrom # 22 " | 43 | ♂ | testes = 5 mm, abdom. Dipodomys | MSB 34927 FC 2792 | G | 275-166-42-13 = " " |
| +chrom # 27 " | 44 | ♂ | testes = 8 mm., abdom. Dipodomys | MSB 34928 FC 2793 | G | 256-154-43-14 = " " |
| [odd morph] +chrom # 23 " | 45 | ♂ | testes = 9 mm. ± scrotal. Dipodomys | MSB 34929 FC 2794 | G | 274-164-44-13 = " " |
| [odd morph] +chrom # 35 " | 46 | ♂ | testes = 8 mm. abdom. Dipodomys | MSB 34930 FC 2795 | G | tail damaged 273-156-43-14 = " " |
| +chrom # 47 " | 47 | ♂ | testes = 9 mm., abdom. Dipodomys [captured 18 July] | MSB 34938 FC 2796 | F | [MSH 48-51 karyotyped 4-10 Aug 1974] 270-152-43-14 = " " |
| +chrom # 59 " [no baculum] | 48 | ♂ | testes = 5 mm., abdom. Dipodomys [captured 6 July] | MSB 34947 FC 2797 | C | 275-172-44-15 = " " |
| +chrom # 38 " | 49 | ♂ | testes = 9 mm., abdom. Dipodomys [captured 18 July] | MSB 34939 FC 2798 | F | 278-168-44-15 = " " |
| +chrom # 60 " | 50 | ♂ | testes = 6 mm., abdom. Dipodomys [captured 6 July] | MSB 34945 FC 2799 | D | 279-167-42-16 = " " |
| +chrom # 56 " | 51 | ♂ | testes = 11 mm., abdom. Dipodomys nitratoides [captured 14 July] | MSB 34885 FC 2891 | E | tail damaged 193-91-35-15 = " " |

2 mi. E. Searles Station, 9 mi WNE Johannesburg, San Bernardino Co., 3200 ft., California

## 7 April

| Notes | No. | Sex | Specimen | Measurements |
|---|---|---|---|---|
| Alcohol | 52 | ♂ | testes scrotal. Onychomys torridus pulcher | 131-40-19-14 = 25 gm. |
| Alcohol | 53 | – | Dipodomys panamintinus mohavensis | mother captured 5 April. 5 Young born dead 20 April |

# Catalogue

Hafner, M.S.
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2 mi. E. Searles Station, 9 mi. NNE of Johannesburg, San Bernardino Co., 3200 ft. California.

27 August

died in lab. 14 Oct.
Alcohol 54 ♀ Onychomys ~~torridus~~ pulcher 113-40-19-14=[no wt.]

29 September

testes abdom. — died in lab 16 Dec.
Alcohol 55 ♂ Onychomys ~~torridus~~ pulcher 118-41-20-14=[" "]

+larynx — died in lab. 18 Dec.
Alcohol 56 ♀ Onychomys ~~torridus~~ pulcher 116-43-19-16=[" "]

7 April

(not to be catalogued MSU)
Alcohol 57 – Dipodomys panamintinus mohavensis [6 newborn young born & abandoned 30 April – ~~[illegible]~~ Fed artifical milk.]

Los Angeles, Los Angeles Co., 500 ft. California

28 December

(Moore Lab.) Occidental College 58 ♀ juv. Streptopelia chinensis [MLZ 66262] [northern breeding record]

Note: The following specimens are from localities as per page 3 A. Catalogued @ UNM

18 July

| | | | | |
|---|---|---|---|---|
| +skel.(part) +tissue +chrom #44, +baculum 59 | ♂ testes = 5 mm, abdom. Dipodomys | MSB 34940 FC 2800 | Locality F | 257-159-42-13=[no wt.] |
| +skel.(part) " +chrom #46 60 | ♂ testes = 6 mm., abdom. Dipodomys | MSB 34941 FC 2801 | F | 264-159-45-14=[" "] |
| +skel.(part) " +chrom #32 61 | ♂ testes = 8 mm., abdom. Dipodomys | MSB 34931 FC 2802 | G | 267-164-44-14=[" "] |

14 July

| | | | | |
|---|---|---|---|---|
| +skel.(part) " +chrom #52 62 | ♂ testes = 10 mm., ± scrotal, tub. visib. in cauda epid. Dipodomys | MSB 34891 FC 2894 | E | 294-177-45-15=[no wt.] |

~~♂ Dipodom~~

6 July

| | | | | |
|---|---|---|---|---|
| +chrom #62 " 63 | ♂ testes = 8 mm, abdom. Dipodomys | MSB 34946 FC 2803 | D | 280-172-46-14=[" "] |

[END 1974]

# Catalogue

Hafner, M.S.

1975

9 mi. E. of Boron, San Bernardino Co., 2500 ft California

18 January

+baculum ? +skeleton +tissue 64 ♂ testes = 9 mm. left scrotal, right abdom. Dipodomys merriami FC. 2699 224-130-39-12 = 34 gm.

11.8 mi. E. of Boron, San Bernardino Co., 2500 ft California

11 January

~~65~~ +ectoparasites, + tissue +baculum +skeleton (part) +stomach 65 ♂ testes = 15 mm. abdom., tub. visib. Onychomys torridus pulcher FC 3016 129-37-18-15 = 17.8 gm.

Caliente Creek Wash, 0.3 mi. NE. of Hwy 58, 5.5 mi (by road) ESE of Edison, Kern Co., California 760 ft [T30S, R30E, SW¼ sec 17]

UNM

[captured 14 July 1974 - Died in Lab. 19 Jan 1975]

+baculum +tissue +skeleton (part) 66 ♂ testes = 11 mm, scrotal, tub. visib. Dipodomys heermanni MSB 34892 FC 2895 276-166-38-15 = [no wt.]

9 mi. E. of Boron, San Bernardino Co., 2500 ft. California

19 January

+tissue +stomach +skeleton (part) +ectoparasites 67 ♀ vag. closed, no emb., no scars Ammospermophilus leucurus FC 3020 192-50-34-8 = 86.5 gm.

Caliente Creek Wash, 0.3 mi. NE of Hwy 58, 5.5 mi (by road) ESE of Edison, Kern Co. California 760 ft.

UNM

6 February

+tissue, blood, baculum, chrom +skeleton (part) 68 ♂ testes = 12 mm, scrotal, tub. visib. captured 14 July 1974 MSB 34893 Dipodomys heermanni FC 2896 286-173-41-16 = [no wt.]

[ " + skel. (part) ] 69 ♂ testes = 11 mm. scrotal, tub. visib. captured 14 July 1974 MSB 34894 tail damage Dipodomys heermanni FC 2897 260-155-42-15 = [ " ]

Sand Canyon, 0.1 mi. S Hwy 58, 3.1 mi. ESE of Monolith, Kern Co. California, 3900 ft. [T32S, R34E, NW¼ sec 27]

UNM

[ " no skel. ] 70 ♂ testis = 11 mm. ± scrotal, tub. visib. captured 17 July 1974 MSB 34942 Dipodomys panamintinus FC 2782 282-172-42-15 = [no wt.]

+ tissue, blood + chrom. ~~+skeleton (part)~~ 71 ♀ vag. closed, uterus swollen, no scars. captured 17 July 1974 MSB 34943 Dipodomys panamintinus FC 2783 255-145-41-14 = [ " ]

# Catalogue

Hafner, M.S.
1975

## 2 mi. E. of Searles Station, 9 mi. NNE Johannesburg, San Bernardino Co., California, 3200 ft. [camp 1]

### 5 February

+ baculum
Skeleton Only 72 ♂ *Dipodomys panamintinus* — testis = 11 mm., scrotal, tub. visib. captured 12 Jan 1975 died in lab. 25 Jan. 278-169-44-15 = 68 gm

Alcohol 73 ♂ *Onychomys torridus pulcher* — captured 27 Aug. 1974 died in lab 5 Jan. 122-38-19-16 = [no wt.]

Alcohol 74 ♀ *Onychomys torridus pulcher* — captured 27 Aug. 1974 died in lab 9 Jan. 139-46-19-16 = [no wt.]

## 7.5 mi. E Boron, San Bernardino Co. 2500 ft. California

### 26 January

have skel. only w/ skull
+ tissue
+ stomach
+ skel. (part) 75 ♀ *Onychomys torridus pulcher* — vag. closed, lactating, uterus swollen. FC 3017 132-41-18-15 = 23 gm

## 2 mi. E. Searles Station, 9 mi. NNE Johannesburg, San Bernardino Co., 3200 ft. California [camp 1]

### 26 January

+ baculum
+ tissue
+ skel (part) 76 ♂ *Onychomys torridus pulcher* — testes = 18 mm. tub. visib. FC 3018 137-38-19-16 = 24 gm.

+ baculum
+ tissue
+ skel. (part) 77 ♂ *Dipodomys merriami* — testes = 10 mm, tub. visib. FC 2705 [Killed in trap by *D. panamintinus*] 238-140-39-14 = 39 gm

+ stomach + tissue
+ skel. (part) 78 ♀ *Ammospermophilus leucurus* — vag. open, swollen, uterus swollen, no emb. FC 3021 197-56-35-9 = 96.5 gm

+ baculum
+ stomach + tissue
+ skel. (part) 79 ♂ *Ammospermophilus leucurus* — testes = 19 mm. scrotal, tub. visib. FC 3022 184-46-36-9 = 104 gm.

+ baculum
+ stomach + tissue
+ skel. (part) 80 ♂ *Neotoma lepida* — testes = 17 mm. R. scrotal, L. abdom. FC 3023 295-126-31-28 = 169 gm

Skeleton Only 81 ♀ *Ammospermophilus leucurus* — vag. open, swollen. uterus swollen, no emb. 212-57-37-8 = 117 gm.

## 11.8 mi. E. of Boron, San Bernardino Co. 2500 ft California

### 23 February

+ skel. (part)
+ cheek pouch contents
+ ectoparasites
+ tissue + baculum
+ stomach 82 ♂ *Dipodomys merriami* — testes scrotal = 9 mm. FC 2700 246-144-38-14 = 42 gm

-OVER-

# Catalogue

Hafner, M. S.
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## 2 mi. E. Searles Station, 9 mi NNE Johannesburg
## San Bernardino Co., California 3200 ft. (Camp 1)

### 22 February

+baculum +tissue +skel(part) +stomach 83 ♂ *Dipodomys panamintinus* FC2821 256-153-44-14=55gm
testes = 9 mm. scrotal

## 11.8 mi. E. Boron, San Bernardino Co. 2500 ft. California

### 5 MARCH

eed ache #66 +blood, tissue +baculum +skel(part) 84 ♂ *Dipodomys merriami* F.C. 2694 250-148-38-14=37gm
testes = 11 mm. scrotal, tub. visib. [captured 23 Feb.] [wt. at capture]

eed ache #35 +blood, tissue +baculum +skel.(part) 85 ♂ *Dipodomys merriami* F.C. 2695 252-150-38-14=37gm
testes = 10 mm. scrotal tub. visib. 7.5 mi. E. Boron [captured 26 Jan.] [" ]

seed ache #74 +blood, tissue +skel.(part) 86 ♀ *Dipodomys merriami* F.C. 2696 247-145-37-14=31gm
vag. closed - uterus swollen, no emb., no scars 9.0 mi. E Boron [captured 19 Jan.] [" ]

ed che #73 +blood, tissue +skel.(part) 87 ♀ *Dipodomys merriami* FC. 2697 250-149-37-14=29gm
vag. closed - uterus swollen 9.0 mi. E. Boron [captured 19 Jan.] [" ]

ed #71 che +blood, tissue +skel.(part) 88 ♀ *Dipodomys merriami* FC. 2698 252-146-37-14=37gm
vag. closed - uterus swollen 9.0 mi. E. Boron [captured 19 Jan.] [" ]

Note: [Serum for 84-87 hemolized]

## 2 mi. E. Searles Station, 9 mi. NNE Johannesburg
## San Bernardino Co., 3200 ft. California

### 5 March

eed ache #64 +blood, tissue +baculum +skel.(part) 89 ♂ *Dipodomys merriami* FC 2706 250-140-38-14=46gm
testes = 10 mm. scrotal, tub. visib. [captured 22 Feb.] [wt. at capture]

eed cache #38 +blood, tissue +baculum +skel.(part) 90 ♂ *Dipodomys panamintinus* FC 2822 302-171-47-15=73gm
testes = 11 mm., scrotal, tub. visib. [captured 12 Jan.] [" ]

eed che #39 +blood, tissue +baculum +skel.(part) 91 ♂ *Dipodomys panamintinus* FC 2823 289-168-45-15=75gm
testes = 14 mm, scrotal, tub. visib. [captured 12 Jan.] [" ]

ed che #40 +blood, tissue +skel.(part) 92 ♀ *Dipodomys panamintinus* FC 2824 284-162-43-15=64gm
vag. swollen, no emb., no scars [captured 12 Jan.] [" ]

ed che #41 +blood, tissue +baculum +skel(part) 93 ♂ *Dipodomys panamintinus* FC 2825 295-175-45-15=79gm
testes = 12 mm scrotal, tub. visib. [captured 12 Jan.] [" ]

seed cache #17 +blood, tissue +skel.(part) 94 ♀ *Dipodomys panamintinus* FC 2826 299-175-44-15=66gm
vag. closed, no emb., no scars [captured 26 Jan.] [" ]

seed cache #18 +blood, tissue +baculum +skel.(part) 95 ♂ *Dipodomys panamintinus* FC 2827 299-176-45-14=73gm
testes = 11 mm. scrotal, tub. visib. [captured 26 Jan.] [" ]

seed cache #19 +blood, tissue +baculum +skel(part) 96 ♂ *Dipodomys merriami* FC 2707 261-158-39-14=41gm
testes = 10 mm., scrotal, tub. visib. [captured 26 Jan.] [" ]

- OVER -

# Catalogue

Hafner, M.S.
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## 2 mi. E Searles Station, 9 mi. NNE Johannesburg, San Bernardino Co. 3200 ft. California

### 6 March

wt. at capture:

ed ✓ #20 che — +blood, tissue +baculum +skel.(part) 97 ♂ — testes = 13 mm, scrotal, tub. visib. [captured 26 Jan.] (72)
*Dipodomys panamintinus* FC 2828 292-165-45-15 = 72gm

ed ✓ #21 he — +blood, tissue +baculum +skel.(part) 98 ♂ — testes = 8 mm, scrotal, tub. visib. [captured 26 Jan.]
*Dipodomys merriami* FC 2708 241-142-38-14 = 38gm

ed ✓ #22 che — +blood, tissue ~~+baculum~~ +skel.(part) 99 ♀ — vag. plugged, emb. 1 L, 2 R reabsorbed [captured 26 Jan.]
*Dipodomys merriami* FC 2709 246-143-39-14 = 38gm

ed ✓ #23 che — +blood, tissue +skel.(part) 100 ♀ — vag. closed, uterus swollen [captured 26 Jan.]
*Dipodomys merriami* FC 2710 256-151-40-13 = 39gm

ed ✓ #24 che — +blood, tissue +skel.(part) 101 ♀ — vag. open, bleeding, scars 3 L, 2 R [captured 26 Jan.] Left kidney = 2x Right in size
*Dipodomys panamintinus* FC 2829 285-161-43-15 = 68gm

NOTE: ALL REPRODUCTIVE INFO. FROM FIELD

## Sand Canyon, 0.4 mi. N. Hwy. 58, 2.9 mi E x S Monolith, Kern Co., California 3900 ft. [T32S, R34E, NW¼ sec 27]

### 9 March

d #71 — +blood, tissue +skel.(part) 102 ♀ — vag. closed – no emb. no scars [captured 10 Nov. 1974] MSB 34988
*Dipodomys panamintinus* FC 2804 285-167-44-15 = [no wt.]

d #72 — +blood, tissue +baculum +skel.(part) 103 ♂ — testes = 12 mm scrotal, tub. visib. [captured 10 Nov. 1974] MSB 34989
*Dipodomys panamintinus* FC 2805 294-174-44-15 = [no wt.]

d #73 — +blood, tissue +skel.(part) 104 ♀ — vag. closed – no emb., no scars [captured 10 Nov. 1974] MSB 34990
*Dipodomys panamintinus* FC 2806 285-168-43-15 = [no wt.]

d #74 — +blood, tissue +skel.(part) 105 ♀ — vag. closed – uterus swollen [captured 10 Nov. 1974] MSB 34991
*Dipodomys panamintinus* FC 2807 280-154-43-14 = [no wt.]

#1 — +blood, tissue +baculum +skel.(part) 106 ♂ — testes = 10 mm, scrotal, tub. visib. [captured 26 Jan.]
*Dipodomys panamintinus* FC 2808 287-170-44-15 = 70 gm

#2 — +blood, tissue +skel.(part) 107 ♀ — vag. closed, no emb., no scars [captured 26 Jan.] MSB 34992
*Dipodomys panamintinus* FC 2809 282-164-42-14 = 63gm

#3 — +blood +tissue +skel.(part) 108 ♀ — vag. closed, no emb., no scars [captured 26 Jan.] MSB 34993
*Dipodomys panamintinus* FC 2810 291-170-43-15 = 67gm

#5 — +blood, tissue +baculum +skel.(part) 109 ♂ — testes = 12 mm., scrotal, tub. visib. [captured 26 Jan.] MSB 34994
*Dipodomys panamintinus* FC 2811 300-180-44-15 = 73gm

#6 — +blood, tissue +skel.(part) 110 ♀ — vag. closed, no emb., no scars [captured 26 Jan.] MSB 34995
*Dipodomys panamintinus* FC 2812 295-177-45-16 = 64gm

#7 — + blood, tissue +skel.(part) 111 ♀ — vag. plugged, uterus very swollen no emb. [captured 26 Jan.] MSB 34996
*Dipodomys panamintinus* FC 2813 293-177-43-15 = 58gm

seed cache #8 — +blood, tissue +skel.(part) 112 ♀ — vag. closed, uterus very swollen, no emb. [captured 26 Jan.] MSB 34997
*Dipodomys panamintinus* FC 2814 289-165-43-15 = 71gm

+ burrow system

### 16 March

#9 — +blood, tissue +baculum +skel.(part) 113 ♂ — testes = 12 mm, scrotal, tub. visib. [captured 26 Jan.] MSB 34998
*Dipodomys panamintinus* FC 2815 276-148-44-15 = 83gm

#12 — + blood, tissue +skel.(part) 114 ♀ — vag. closed, uterus swollen, no emb. no scars [captured 26 Jan.] MSB 34999
*Dipodomys panamintinus* FC 2816 278-155-42-14 = 65gm

# Catalogue

Hafner, M. S.
1975

Sand Canyon, 0.4 mi. N. Hwy 58, 2.9 mi. E x S Monolith, Kern Co., California, 3949 ft. [T32R, R34E, NW¼ sec 27]

[have skel]

16 March [con't]

eed / che #13 — + blood, tissue + baculum + skel. (part) 115 ♂ Dipodomys panamintinus — testes = 11 mm. scrotal, tub. visib. [captured 26 Jan.] — FC 2817 — MSB 35000 — 308-186-44-15 = 68 gm

d / e #14 — + blood, tissue + baculum + skel. (part) 116 ♂ Dipodomys panamintinus — testes = 11 mm. scrotal, tub. visib. [captured 26 Jan.] [tail damaged] — FC 2818 — MSB 35001 — 266-139-42-15 = 78 gm

#15 — + blood, tissue + skel. (part) 117 ♀ Dipodomys panamintinus — vag. closed, swollen, no emb., no scars [captured 26 Jan.] — FC 2819 — MSB 35002 — 288-173-43-15 = 68 gm

+ blood, tissue + baculum + skel. (part) 118 ♂ Dipodomys panamintinus — testes = 12 mm. scrotal, tub. visib. [captured 26 Jan.] — FC 2820 — MSB 35003 — 307-176-44-15 = 85 gm

MSH 119-130
Catalogued at UNM

25 mi. South of Dugway, Tooele Co., Utah.

22 March

Skeleton only (UNMexico) 119 ♂ Dipodomys ordii — testes = 11 mm., scrotal; tub. visib. in epid. — 238-132-40-13 = 48 gm

Skeleton only 120 ♂ Dipodomys ordii — testes = 11 mm, scrotal; tub. visib in epid. and testes. — 243-137-39-13 = 41 gm

Skeleton only 121 ♂ Dipodomys ordii — testes = 5 mm, abdom. — 213-112-38-10 = 30 gm

Skeleton only 122 ♀ Dipodomys ordii — vag. open; nipple wear; scars: 2R-3L — 247-137-40-12-41 gm

Skeleton only 123 ♂ Dipodomys ordii — testes = 10 mm, scrotal, tub. visib. in epid. — 247-136-41-13 = 46 gm

Skeleton only 124 ♀ Dipodomys ordii — vag. open; nipple wear; scars: 2L-2R — 238-127-38-12 = 38 gm

Skeleton only 125 ♂ Dipodomys ordii — testes = 10 mm, scrotal; tub. visib. in epid. and testes — 235-128-41-13 = 41 gm

Skeleton only 126 ♂ Dipodomys ordii — testes = 5 mm. abdom. — 208-110-38-12 = 24 gm.

8

12.0 mi. S. Garrison, Millard Co., Utah.

23 March

Skeleton only 127 ♂ Peromyscus maniculatus — testes = 9 mm. ± scrotal tub. vis. in epid. (only left testis devel.) (slight tail damage) — 147-65-20-17 = 14.5 gm

Skeleton only 128 ♂ Peromyscus maniculatus — testes = 8 mm, ± scrotal tub. visib. in epid. — 147-74-18-16 = 13 gm

Skeleton only 130 MSH ~~129~~ ♀ Peromyscus maniculatus — vag. open, blood filled; scars = 4L-0R (blk) resorb. emb = 3R = 4 mm. — 164-75-18-19 = 17 gm

Skeleton only 129 MSH ~~130~~ ♀ Peromyscus maniculatus — vag. open, emb. = 3L, 2R = 2 mm.; plac. scars = 1L-4R corpora lutea present — 165-72-19-19 = 21 gm

11.8 mi. E. Boron, San Bernardino Co. 2500 ft. California

need skin + skull — have skel.

23 February

+ blood, tissue + skel. (part) 131 ♀ Dipodomys merriami — vag. closed, uterus swollen, reabsorbed emb. 2L-1R [killed in lab 12 April] [tail damage] — F.C. 2701 — 203-102-38-15 = 36 gm

need skins for these
missing skull to 137 [illegible]

# Catalogue

Hafner, M. S.
1975

## 11.8 mi. E. Boron, San Bernardino Co. 2500', California

### 12 April (con't)

+tissue +blood +skel. (part) 132 ♀ *Dipodomys merriami* — vag. closed, uterus swollen, no emb. no scars (captured 23 February) — FC 2702 — 251-150-38-15=36 gm

+blood, tissue +baculum +skel. (part) 133 ♂ *Dipodomys merriami* — testes=10 mm., scrotal, tub. visib. [captured 23 Feb.] [tail damage] — FC 2703 — 262-155-39-14=38 gm

+blood, tissue +baculum +skel. (part) 134 ♂ *Dipodomys merriami* — testes=11 mm., scrotal, tub. visib. [captured 23 Feb.] — FC 2704 — 249-143-38-14=40 gm

## 2 mi. E. Searles Station, 9 mi. NNE Johannesburg, 3200 ft. San Bernardino Co., California

### 12 April [con't]

+tissue, blood +baculum +skel. (part) 135 ♂ *Dipodomys merriami* — testes=11 mm., scrotal, tub. visib. [captured 22 Feb.] — FC 2711 — 261-154-38-14=44 gm

[ " ] 136 ♂ *Dipodomys merriami* — testes=11 mm., scrotal, tub. visib. [captured 22 Feb.] — FC 2712 — 252-148-39-15=39 gm

seed cache #54 +tissue, blood +skel. (part) 137 ♀ *Dipodomys panamintinus* — vag. open, uterus swollen, no emb. no scars [captured 22 Feb.] — FC 2830 — 288-168-46-15=66 gm

(51) +tissue, blood +baculum +skel. (part) 138 ♂ *Dipodomys panamintinus* — testes=11 mm., scrotal, tub. visib. [captured 22 Feb.] — FC 2831 — 296-176-47-15=77 gm

[ " ] 139 ♂ *Dipodomys panamintinus* — testes=12 mm., scrotal, tub. visib. [captured 22 Feb.] — FC 2832 — 291-175-46-16=69 gm

[ " ] 140 ♂ *Dipodomys merriami* — testes=11 mm., scrotal, tub. visib. [captured 22 Feb.] [tail damage] — FC 2833 — 208-106-38-15=38 gm

### 14 April

+blood +tissue 141 ♀ *Dipodomys merriami* — vag. closed [captured 22 Feb.] [tail damaged] — FC 2713 — =35 gm

+blood +tissue 142 ♂ *Dipodomys panamintinus* — testes= mm. scrotal [ " " " ] — FC 2834 — =72 gm

+blood +tissue 143 ♀ *Dipodomys panamintinus* — vag. closed [ " " " ] — FC 2835 — =64 gm

+blood +tissue 144 ♀ *Dipodomys panamintinus* — vag. closed [ " " " ] — FC 2836 — =70 gm

+blood +tissue 145 ♀ *Dipodomys merriami* — vag. closed [ " " " ] — FC 2714 — =34 gm

+blood +tissue 146 ♀ *Dipodomys panamintinus* — vag. closed [ " " " ] — FC 2837 — =69 gm

+blood +tissue 147 ♂ *Dipodomys panamintinus* — testes= mm. scrotal [ " " " ] — FC 2838 — =81 gm

seed cache #62 +blood +tissue 148 ♂ *Dipodomys merriami* — testes= mm., scrotal — FC 2715 — =39 gm

## 4.5 mi. N, 20.5 mi. W Hawthorne, Lyon Co., 5000 ft. Nevada

[captured 17 Sept. 1974]
prep. 14 April 1975

+blood, tissue SKULL ONLY 149 ♀ *Dipodomys panamintinus leucogenys* — vag. closed, wall. — FC 2890 — 297-192-47-16=nowt.

# Catalogue

Hafner, M.S.
1975

## 5 mi. E. California City, Kern Co., 2500 ft., California

### 14 April (con't)

ed cache 100 +blood +tissue 150 ♂ *Dipodomys merriami* testes = mm. abdom. [captured 5/4 April] FC 2716 =45gm

ed che 101 +blood +tissue 151 ♀ *Dipodomys merriami* vag. closed [captured 5 April] FC 2717 =33gm

ed che 102 +blood +tissue 152 ♀ *Dipodomys merriami* vag. closed [" " "] FC 2718 =38gm

ed che 103 +blood +tissue 153 ♀ *Dipodomys merriami* vag. closed [" " "] FC 2719 =38gm

ed che 104 +blood, tissue SKULL ONLY 154 ♀ *Dipodomys panamintinus* vag. closed, parous, no scars [" " "] FC 2865 266-165-41-14 =52gm

d che 105 +blood, tissue SKULL ONLY +baculum 155 ♂ *Dipodomys panamintinus* testes = 5x3 mm ± scrotal [" " "] FC 2866 260-155-43-15 =56gm

ed cache #106 +blood +tissue 156 ♀ *Dipodomys merriami* vag. closed [" " "] FC 2720 =41gm

seed cache #107 +blood +tissue 157 ♂ *Dipodomys merriami* testes = mm., scrotal [" " "] FC 2721 =45gm

seed cache #108 +blood +tissue 158 ♂ *Dipodomys merriami* testes = mm., scrotal [" " "] FC 2722 =43gm

seed cache #109 +blood, tissue SKULL ONLY +baculum 159 ♂ *Dipodomys panamintinus* testes = 6x3 mm, ± scrotal [" " "] FC 2867 275-162-42-14 =59gm

## 2.6 mi. S, 6.3 mi. W. Randsburg, Kern Co., 2900 ft. California

### [captured 9 April] prepared 15 April

ed che 0 +blood +tissue 160 ♂ *Dipodomys merriami* testes = mm., scrotal FC 2729 =36gm

ed che 11 +blood +tissue 161 ♂ *Dipodomys merriami* testes = mm., scrotal FC 2730 =38gm

ed che 12 +blood +tissue 162 ♀ *Dipodomys merriami* vag. closed FC 2731 =33gm

seed che 113 +blood +tissue 163 ♂ *Dipodomys merriami* testes = mm., abdom. FC 2732 =40gm

ed che 14 +blood +tissue 164 ♀ *Dipodomys merriami* vag. closed FC 2733 =33gm

ed che 15 +blood +tissue 165 ♂ *Dipodomys merriami* testes = mm., scrotal FC 2734 =49gm

ed che 27 +blood +tissue 166 ♀ *Dipodomys merriami* vag. closed FC 2735 =38gm

d che 128 +blood +tissue 167 ♂ *Dipodomys merriami* testes = mm., abdom. FC 2736 =40gm

seed cache #129 +blood +tissue 168 ♂ *Dipodomys merriami* testes = mm., scrotal FC 2737 =40gm

seed cache #130 +blood +tissue 169 ♂ *Dipodomys merriami* testes = mm., abdom. FC 2738 =36gm

seed cache #131 +blood +tissue 170 ♀ *Dipodomys merriami* vag. closed FC 2739 =37gm

seed cache #116 +blood +tissue SKULL ONLY +baculum 171 ♂ *Perognathus formosus* testes = 5x2 mm., abdom. FC 2939 186-106-24-12 =19gm

# Catalogue

Hafner, M.S.
1975

## 2.6 mi. S., 6.3 mi. W. Randsburg, Kern Co. 2900 ft. California

[Captured 9 April - Prepared 15 April]

ed che 117 — +blood +tissue SKULL ONLY +baculum — 172 ♂ *Perognathus formosus* — FC 2940 — 187-103-25-12 = 19 gm — testes = 5x2 mm., abdom.

ed che 122 — +tissue +blood SKULL ONLY +baculum — 173 ♂ *Perognathus longimembris* — FC 2981 — 136-69-19-7 = 8 gm — testes = 3x2 mm, abdom.

ed che 123 — +tissue +blood SKULL ONLY — 174 ♀ *Perognathus longimembris* — FC 2982 — 130-66-19-7 = 7 gm — vag. closed, ~~[no repro info.]~~, nulliparous

ed che 125 — +tissue +blood SKULL ONLY — 175 ♀ *Perognathus longimembris* — FC 2983 — 124-[61]-19-7 = 7 gm — vag. closed, recent scars: 3R-2L — slight tail damage

ed che 126 — +tissue +blood SKULL ONLY +baculum — 176 ♂ *Perognathus longimembris* — FC 2984 — 130-70-20-7 = 9 gm — testes = 3x2 mm. abdom.

## 3.0 mi. N. Mojave, Kern Co., 3100 ft., California

Captured 14 April - Prepared 15 April

+seed cache #132 — +blood +tissue SKULL ONLY — 177 ♀ *Dipodomys panamintinus* — FC 2870 — 287-165-43-16 = 67.5 gm — vag. closed, recent parts: 1R-2L, reabsorbed emb: 1R-1L, nipple wear.

+seed cache #133 — +blood — 178 ♂ *Dipodomys panamintinus* — FC 2871 — = 46.7 gm — testes = mm. abdom.

+seed cache #134 — [no blood] + tissue — 179 ♀ *Dipodomys merriami* — FC 2770 — = 29.5 gm — vag. closed

+seed cache #135 — [no blood] +tissue — 180 ♂ *Dipodomys merriami* — FC 2771 — = 47.5 gm — testes = mm., recently ascended.

+seed cache #136 — [no blood] +tissue — 181 ♀ *Dipodomys merriami* — FC 2772 — = 40.5 gm — vag. closed

+seed cache #137 — [no blood] +tissue — 182 ♀ *Dipodomys merriami* — FC 2773 — = 37 gm — vag. open - aborted litter of (4) - approx. 3/4 term.

+seed cache #138 — +blood + tissue — 183 ♀ *Dipodomys merriami* — FC 2723 — = 26.1 gm — vag. open - swollen

seed cache 139 — +blood +tissue — 184 ♂ *Dipodomys merriami* — FC 2724 — = 42.3 gm — testes = mm., ± scrotal

seed cache 140 — +blood +tissue — 185 ♂ *Dipodomys merriami* — FC 2725 — = 39.9 gm — testes = mm., ± scrotal

seed cache 141 — +blood +tissue — 186 ♂ *Dipodomys merriami* — FC 2726 — = 38.2 gm — testes = mm., ± scrotal

seed cache 142 — +blood +tissue — 187 ♂ *Dipodomys merriami* — FC 2727 — = 38.5 gm — testes = mm., scrotal

+seed cache #143 — +blood +tissue — 188 ♀ *Dipodomys merriami* — FC 2728 — = 35 gm — vag. closed

## Caliente Creek Wash 0.3 mi NE Hwy 58, 5.5 mi (by road) ESE Edison, Kern Co, 760', California

Captured 14 July 1974 - Prepared 16 April 1975

+blood +tissue — 189 ♀ *Dipodomys nitratoides* — FC 2892 — = [no wt.] — vag. closed

+blood +tissue — 190 ♀ *Dipodomys nitratoides* — FC 2893 — = [no wt.] — vag. closed

[over]

# Catalogue

Hafner, M. S.
1975

3.0 mi. N. Mojave, Kern Co., 3100 ft., California

Captured 14 April - Prepared 17 April

ed (✓) +blood-tissue
he SKULL ONLY
44 +baculum 191 ♂ Perognathus longimembris FC 2991 135-73-20-7 = 8.5 gm
testes = 5X3 mm. ± scrotal

ed (✓) +blood-tissue
he SKULL ONLY
45 +baculum 192 ♂ Perognathus longimembris FC 2992 124-66-19-7 = 7.3 gm
testes = R=2X1 L=5X3 mm. ± scrotal

ed (✓) +blood-tissue
he SKULL ONLY
146 +baculum 193 ♂ Perognathus longimembris FC 2993 133-72-19-7 = 7.5 gm
testes = L=5X3 R=3X2 mm. ± scrotal

ed (✓) +blood-tissue
#147 SKULL ONLY +baculum 194 ♂ Perognathus longimembris FC 2994 129-71-19-7 = 7.5 gm
testes = 3X1 mm., ± scrotal

ed (✓) +blood-tissue
he SKULL ONLY
48 +baculum 195 ♂ Perognathus longimembris FC 2995 128-69-18-6 = 7.0 gm
testes = 4X3 mm., ± scrotal, tub. visib. in caud. epid.

ed (✓) +blood-tissue
he SKULL ONLY
49 +baculum 196 ♂ Perognathus longimembris FC 2996 110-[46]-19-8 = 7.9 gm
testes = 4X3 mm. ± scrotal, tub. visib. in caud. epid. tail damaged

tissue [no blood]
SKULL ONLY
+baculum 197 ♂ Perognathus longimembris FC 2997 141-75-18-7 = 5.9 gm
testes = 4X3 mm, abdom.

ed (✓) +blood-tissue
che SKULL ONLY
150 +baculum 198 ♂ Perognathus longimembris FC 2998 136-73-19-7 = 7.2 gm
testes = 3X2 mm., abdom.

+seed (✓) +blood
cache +tissue
#151 SKULL ONLY +baculum 199 ♂ Perognathus longimembris FC 2999 137-74-20-7 = 7.7 gm
testes = 5X3 mm., ± scrotal, tub. visib. in caud. epid.

d (✓) +blood
he +tissue
2 SKULL ONLY +baculum 200 ♂ Perognathus longimembris FC 3000 136-73-19-7 = 7.2 gm
testes = 3X2 mm. ± scrotal

d (✓) +blood
he +tissue
3 SKULL ONLY +baculum 201 ♂ Perognathus longimembris FC 3001 128-65-19-8 = 7.0 gm
testes = 5X3 mm, abdom.

ed (✓) +blood
che +tissue
4 SKULL ONLY 202 ♀ Perognathus longimembris FC 3002 132-71-19-7 = 6.8 gm
vag. closed, scars: 3R-2L, not lactating.

d (✓) +tissue
e +blood
6 SKULL ONLY +baculum 203 ♂ Perognathus longimembris FC 3003 123-61-18-7 = 6.2 gm
testes = 3X2 mm., abdom

ed (✓) +tissue
he +blood
7 SKULL ONLY 204 ♀ Perognathus longimembris FC 3004 133-71-18-7 = 7.7 gm
vag. closed (nulliparous?)

ed +blood
che +tissue
8 SKULL ONLY +baculum 205 ♂ Perognathus longimembris FC 3005 145-79-20-7 = 8.0 gm
testes = R=2X1 L=4X3 mm., ± scrotal

d w/o
he
9

5 mi. E. California City, Kern Co., 2500 ft. California

Captured 17 April - Prepared 19 April

ed +tissue
che
9 ONLY 206 ♀ Dipodomys panamintinus FC 2868 = [not wt.]
vag. closed, pregnant

ed +blood, +tissue
che +baculum
60 SKULL ONLY 207 ♂ Dipodomys panamintinus FC 2869 235-135-43-15 = 40.5 gm
testes = 5X3 mm., ± scrotal [baculum sent to ...]

ed +blood
che +tissue
61 208 ♂ Dipodomys merriami FC 2740 = 35.2 gm
testes = mm., scrotal

+seed +tissue (✓)
cache +blood
#162 SKULL ONLY 209 ♀ Perognathus longimembris FC 3006 128-68-18-7 = 6.8 gm
vag. closed, parous, no emb., no scars

+seed +tissue (✓)
cache +blood
#163 SKULL ONLY 210 ♂ Perognathus longimembris FC 3007 123-66-18-7 = 6.7 gm
testes = 3X2 mm., abdom.

ed +blood (✓)
che +tissue
64 SKULL ONLY 211 ♂ Perognathus longimembris FC 3008 132-70-20-6 = 7.1 gm
testes = 3X2 mm. ± scrotal

ed +blood (✓)
cache +tissue
#165 SKULL ONLY +baculum 212 ♂ Perognathus longimembris FC 3009 150-78-21-7 = 11.7 gm
testes = 4X3 mm. abdom.

# Catalogue

Hafner, M.S.
1975

5 mi. E. California City, Kern Co., 2500 ft. California

Captured 17 April - Prepared 20 April

| | | | | |
|---|---|---|---|---|
| (1) + blood + tissue SKULL ONLY 213 | ♀ Perognathus longimembris (vag. closed, scars 2 gen.) | FC 3010 | 128-[62]-19-7 = 8.6 gm (tail damaged) |
| (1) + blood + tissue SKULL ONLY + baculum 214 | ♂ Perognathus longimembris (testes = 2×1 mm., ? scrotal) | FC 3011 | 130-71-18-7 = 7.7 gm |
| (1) + blood + tissue SKULL ONLY 215 | ♀ Perognathus longimembris (vag. closed (nulliparous?)) | FC 3012 | 130-68-19-7 = 8.1 gm |
| (1) + tissue + blood SKULL ONLY + baculum 216 | ♂ Perognathus longimembris (testes = 2×1 mm., abdom.) | FC 3013 | 126-67-19-7 = 8.3 gm |
| (1) + blood + tissue SKULL ONLY + baculum 217 | ♂ Perognathus formosus (testes = 4×2 mm., abdom.) | FC 2956 | 170-92-24-12 = 16.3 gm |
| (1) + blood + tissue SKULL ONLY 218 | ♀ Perognathus formosus (vag. closed, nulli-pelvis unstretched) | FC 2957 | 182-95-24-11 = 16.5 gm |
| (1) + blood + tissue SKULL ONLY + baculum 219 | ♂ Perognathus formosus (testes = 5×3 mm., abdom.) | FC 2958 | 171-93-25-12 = 17.4 gm |
| (1) + tissue + blood SKULL ONLY #173 220 | ♀ Perognathus formosus (vag. closed, nulliparous) | FC 2959 | 161-86-24-11 = 15.3 gm |

2.6 mi. S, 6.3 mi. W Randsburg, Kern Co., 2900 ft. California

Captured 9 April - Prepared 21 April

| | | | |
|---|---|---|---|
| (1) + blood + tissue SKULL ONLY + baculum 221 | ♂ Perognathus formosus (testes = 6×3 mm., abdom.) | FC 2941 | 179-98-26-12 = 17 gm |
| (1) + tissue + blood SKULL ONLY + baculum 222 | ♂ Perognathus formosus (testes = 6×3 mm., abdom.) | FC 2942 | 187-106-25-11 = 17 gm |
| (1) + blood + tissue SKULL ONLY 223 | ♀ Perognathus formosus (vag. closed, nulliparous) | FC 2943 | 168-[88]-25-11 = 17 gm (slight tail damage) |
| + Chrom. + tissue (labeled JCH 857) 224 | ♂ Perognathus formosus (testes = mm., abdom.) | = JCH 857 | 176-83-25-13 = 17 gm |

3.0 mi. N. Mojave, Kern Co., 3100 ft. California

Captured 14 April - Died in lab. 21 April.

| | | | |
|---|---|---|---|
| + tissue 225 | ♀ Onychomys torridus (vag. closed, nulliparous) | FC 3019 | 127-43-20-16 = 11.3 gm |

5 mi. E. California City, Kern Co., 2500 ft. California

Captured 17 April - died in lab. 21 April

| | | | |
|---|---|---|---|
| SKULL ONLY (1) 226 | ♀ Onychomys torridus (vag. closed) | | 130-48-18-16 = 11.0 gm |

Captured 17 April - Prepared 22 April

| | | | |
|---|---|---|---|
| (1) + blood + tissue #174 SKULL ONLY 227 | ♀ Perognathus formosus (vag. closed, no emb., no scars, [null.?]) | FC 2960 | 158-[80]-24-11 = 17.2 gm (tail damaged) |
| (1) + blood + tissue 175 SKULL ONLY + baculum 228 | ♂ Perognathus formosus (testes = 5×3 mm., abdom.) | FC 2961 | 184-103-25-11 = 18.5 gm |
| (1) + blood + tissue 176 SKULL ONLY + baculum 229 | ♂ Perognathus formosus (testes = 5×3 mm., abdom.) | FC 2962 | 171-92-25-11 = 17.9 |

# Catalogue

Hafner, M.S.
1975

## 5 mi. E. California City, Kern Co., 2500 ft., California

### Captured 17 April - Prepared 22 April

seed cache #177 +blood +tissue SKULL ONLY 230 ♀ *Perognathus formosus* — vag. closed, scars: 3R-2L, not lactating. — FC 2963 — tail damaged 114-[37]-24-11 = 15.2

seed cache #178 +blood +tissue SKULL ONLY 231 ♀ *Perognathus formosus* — vag. closed, scars 2 gen. [R=3 L=3] older = [R=3 L=2] — FC 2964 — 178-90-25-11 = 19.3 gm

seed cache #179 +blood +tissue +baculum 232 ♂ *Perognathus formosus* — testes = 5x2 mm., ± scrotal — FC 2965 — tail damaged 140-[57]-24-12 = 18.4 gm

seed cache #180 +blood +tissue SKULL ONLY +baculum 233 ♂ *Perognathus formosus* — testes = 6x2 mm., scrotal — FC 2966 — tail damaged 159-[72]-26-12 = 18.7 gm

seed cache #181 +blood +tissue SKULL ONLY +baculum 234 ♂ *Perognathus formosus* — testes = 7x3 mm., abdom. — FC 2967 — 173-91-26-12 = 20.8 gm

seed cache #182 +blood +tissue SKULL ONLY +baculum 235 ♂ *Perognathus formosus* — testes = R: 9x5 L: 5x3 mm., ± scrotal, tub. visib. — FC 2968 — 188-100-25-12 = 22.3 gm

seed cache #183 +blood +tissue SKULL ONLY +baculum 236 ♂ *Perognathus formosus* — testes = 5x3 mm., abdom. — FC 2969 — 170-90-25-11 = 16.1 gm

seed cache #184 +baculum +blood +tissue SKULL ONLY 237 ♂ *Perognathus formosus* — testes = 5x3 mm., ± scrotal — FC 2970 — 174-97-24-11 = 18.1 gm

+seed cache #185 +blood +tissue SKULL ONLY 238 ♀ *Perognathus formosus* — vag. closed, no emb., no scars [nulliparous?] — FC 2971 — 171-95-24-12 = 16.3 gm

seed cache #186 +blood +tissue SKULL ONLY +baculum 239 ♂ *Perognathus formosus* — testes = 5x2 mm., abdom. — FC 2972 — 185-96-27-12 = 22.4 gm

seed cache #187 +blood +tissue SKULL ONLY 240 ♀ *Perognathus formosus* — vag. closed, no emb., no scars, notched pelvis — FC 2973 — 168-90-24-12 = 15.9 gm

seed cache #188 +tissue +blood SKULL ONLY 241 ♀ *Perognathus formosus* — vag. closed, parous, no emb., no scars — FC 2974 — 167-88-24-11 = 14.9 gm

seed cache #189 +tissue +blood SKULL ONLY +baculum 242 ♂ *Perognathus formosus* — testes = 6x3 mm., abdom. — FC 2975 — tail damaged 130-[50]-26-11 = 18.8 gm

seed cache #190 +tissue +blood SKULL ONLY 243 ♀ *Perognathus formosus* — vag. closed, recent scars: 2R-3L — FC 2976 — 187-101-25-12 = 18.1 gm

seed cache #191 +tissue +blood SKULL ONLY 244 ♀ *Perognathus formosus* — vag. closed, [no repro. info.] — FC 2977 — 169-93-24-11 = 15.6 gm

## 2.6 mi S, 6.3 mi. W. Randsburg, Kern Co., 2900 ft. California

### Captured 20 April - Prepared 25 April

seed cache #192 +blood +tissue 245 ♀ *Dipodomys merriami* — vag. closed — FC. 2741 — = 33.2 gm

seed cache #193 +blood +tissue 246 ♀ *Dipodomys merriami* — vag. closed — FC. 2742 — = 33.6 gm

seed cache #194 +blood +tissue 247 ♂ *Dipodomys merriami* — testes = mm., ± scrotal — FC. 2743 — = 37.2 gm

+seed cache #195 +blood +tissue 248 ♂ *Dipodomys merriami* — testes = mm., abdom. — FC 2744 — = 39.4 gm

+seed cache #196 +blood +tissue 249 ♂ *Dipodomys merriami* — testes = mm., ± scrotal — FC 2745 — = 45.2 gm

+seed cache #197 +blood +tissue 250 ♂ *Dipodomys merriami* — testes = mm., abdom. — FC 2746 — = 32.0 gm

(over)

# Catalogue

Hafner, M.S.
1975

2 mi. E. Searles Station, 9 mi. NNE Johannesburg, 3200 ft.
San Bernardino Co., California.

26 April

| | | | | |
|---|---|---|---|---|
| SKELETON ONLY (✓) | 251 | ♀ | Perognathus longimembris (vag. closed, scars = 4R; 6L.) | 138-71-19-8 = 8.1 gm |
| SKELETON ONLY (✓) | 252 | ♂ | Perognathus longimembris (testes = 2.5 mm., abdom.) | 138-74-19-7 = 6.9 gm |
| SKELETON ONLY (✓) | 253 | ♂ | Perognathus longimembris (testes = 2.5 mm., abdom.) | 140-77-18-7 = 6.9 gm |
| SKELETON ONLY (✓) | 254 | ♀ | Onychomys torridus (vag. closed, no emb., no scars.) | 135-46-20-21 = 21 gm |
| SKELETON ONLY (✓) | 255 | ♀ | Perognathus formosus (vag. closed, scars 6R-5L) | 186-103-24-13 = 17.1 gm |
| SKELETON ONLY (✓) | 256 | ♂ | Perognathus formosus (testes = 4.5 mm., abdom.) | 181-100-26-11 = 19 gm |

0.15 mi. E. Walker Pass Summit, 11 mi. W. Inyokern, 5100 ft.,
Kern Co. California

27 April

| | | | | |
|---|---|---|---|---|
| SKELETON ONLY (✓) | 257 | ♀ | Dipodomys panamintinus (vag. closed; emb. 1R-2L = 6 mm.) | 274-180-41-15 = 61.5 gm |
| SKELETON ONLY (✓) | 258 | ♂ | Peromyscus truei (testes = 10 mm., ± scrotal, tub. visib.) | 182-98-23-25 = 20.5 gm |
| SKELETON ONLY (✓) | 259 | ♂ | Peromyscus boylei (testes = 10 mm., scrotal, tub. visib.) | 168-91-20-19 = 20.7 gm |

1.1 mi. by road E. of Walker Pass Summit, 10 mi. W. Inyokern, Kern Co.
4700 ft., California

27 April (con't)

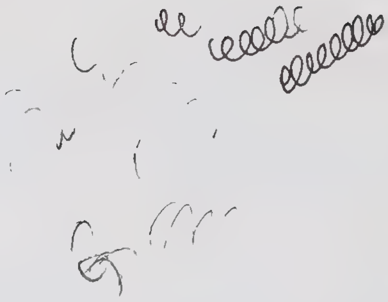
| | | | | |
|---|---|---|---|---|
| SKELETON ONLY (✓) | 260 | ♀ | Dipodomys panamintinus (vag. closed) | 266-158-43-14 = 68.7 |

3.9 mi. by road, E. Walker Pass Summit, 10 mi. W. Inyokern, 4700 ft.
Kern Co., California

27 April [con't]

| | | | | |
|---|---|---|---|---|
| SKELETON ONLY (✓) | 261 | ♀ | Peromyscus truei (vag. open, R. horn of uterus swollen, no emb.) | 172-87-22-23 = 19 gm |
| SKELETON ONLY (✓) | 262 | ♀ | Peromyscus maniculatus (vag. closed, uterus swollen, no emb., no scars) | 140-66-20-17 = 14.8 gm |

(OVER)



# Catalogue

Hafner, M.S.

1975

## 2.6 mi. S, 6.3 mi W. Randsburg, Kern Co., 2900 ft., California

### Captured 17 April - Prepared 28 April

| Margin notes | No. | Sex | Species / notes | Field no. | Measurements | Weight |
|---|---|---|---|---|---|---|
| +blood + tissue | 263 | ♀ | *Dipodomys merriami* (vag. open, swollen) | FC 2747 | | =33 gm |
| +blood + tissue | 264 | ♀ | *Dipodomys merriami* (vag. closed) | FC 2748 | | =37.2 gm. |
| + tissue + blood SKULL ONLY +baculum #200 | 265 | ♂ | *Perognathus formosus* (testes = 5x3 mm., ± scrotal) | FC 2944 | 193-107-27-12 | = 23 gm |
| + tissue + blood SKULL ONLY #201 | 266 | ♀ | *Perognathus formosus* (vag. closed, no embs., no scars, parous) | FC 2945 | 185-105-25-12 | = 17.8 gm |
| + tissue + blood SKULL ONLY +baculum #202 | 267 | ♂ | *Perognathus formosus* (testes = 5x3 mm., ± scrotal) | FC 2946 | 193-115-24-12 | = 17.2 gm |
| seed cache + tissue + blood SKULL ONLY #203 | 268 | ♀ | *Perognathus formosus* (vag. closed; scars: [2 gen] 6R-6L [3R-3L for each gen.]) | FC 2947 | 180-98-24-11 | = 16 gm |

## 3.0 mi. N. Mojave, Kern Co. 3100 ft. California.

### Captured 14 April - Prepared 29 April

| Margin notes | No. | Sex | Species / notes | Field no. | Measurements | Weight |
|---|---|---|---|---|---|---|
| +seed cache #204 +blood + tissue | 269 | ♂ | *Dipodomys panamintinus* (testes = mm., scrotal) | FC 2872 | | =52.9 gm |
| seed cache #205 +blood + tissue | 270 | ♂ | *Dipodomys panamintinus* (testes = mm., scrotal) | FC 2873 | | = 63 gm |
| seed cache #206 + tissue + blood SKULL ONLY | 271 | ♀ | *Dipodomys panamintinus* (vag. closed, recent partus 2R-1L, nipple wear) | FC 2874 | 255-153-44-14 | = 48.2 gm. |
| seed cache #207 + tissue + blood SKULL ONLY +baculum | 272 | ♂ | *Dipodomys panamintinus* (testes = 5x2 mm., abdom.) | FC 2875 | 262-150-44-15 | = 42.1 gm. |
| seed cache #208 +blood + tissue SKULL ONLY | 273 | ♀ | *Dipodomys panamintinus* (vag. closed, recent partus 2R-2L, nipple wear) | FC 2876 | 271-155-42-15 | = 45 gm |
| seed cache #209 +blood + tissue | 274 | ♀ | *Dipodomys merriami* (vag. closed) | FC 2749 | | = 40.9 gm |
| seed cache #210 +blood + tissue | 275 | ♀ | *Dipodomys merriami* (vag. open) | FC 2750 | | = 33.2 gm |
| seed cache #211 +blood + tissue | 276 | ♂ | *Dipodomys merriami* (testes = mm., scrotal) | FC 2751 | | =35.5 gm |
| seed cache #212 +blood + tissue | 277 | ♂ | *Dipodomys merriami* (testes = mm., scrotal) | FC 2752 | | = 40 gm |
| +seed cache #213 + blood + tissue | 278 | ♂ | *Dipodomys merriami* (testes = mm., scrotal) | FC 2753 | | = 37.2 gm |
| +seed cache #214 + blood + tissue | 279 | ♂ | *Dipodomys merriami* (testes = mm., scrotal) | FC 2754 | | = 38 gm |
| + seed cache #215 +blood + tissue | 280 | ♀ | *Dipodomys merriami* (vag. closed) | FC 2755 | | =38.5 gm |
| +seed cache #216 +blood + tissue | 281 | ♂ | *Dipodomys merriami* (testes = mm., ± scrotal) | FC 2756 | | = 46 gm |
| +seed cache #217 +blood + tissue | 282 | ♀ | *Dipodomys merriami* (vag. closed) | FC 2757 | | = 33.9 gm |
| +seed cache #218 +blood + tissue | 283 | ♂ | *Dipodomys merriami* (testes = mm. ± scrotal) | FC 2758 | | =34.8 gm. |
| +seed cache #219 +blood + tissue | 284 | ♀ | *Dipodomys merriami* (vag. closed) | FC 2759 | | =22.5 |

# Catalogue

Hafner, M.S.
1975

3.0 mi. N. Mojave, Kern Co., 3100 ft. California

Captured 14 April - Prepared 1 May

...d ...he ...20 +blood +tissue vag. closed
285 ♀ Dipodomys merriami FC 2760 =38.1gm

...d ...he ...21 +blood +tissue testes = mm., scrotal
286 ♂ Dipodomys merriami FC 2761 =34.6gm

0.15 mi. E. Walker Pass Summit, 11 mi. W. Inyokern, 5100 ft., Kern Co., California

Captured 27 April. - Died in lab 2 May

+ tissue
287 ♂ Dipodomys panamintinus FC 2878

...d ...he ...222 +blood, + tissue SKULL ONLY +baculum testes = 11x5 mm., abdom., tub. visib. in cauda. epid.
288 ♂ Dipodomys panamintinus FC 2879 282-164-42-14=54gm

seed cache #223 +blood + tissue testes = mm., scrotal
289 ♂ Dipodomys panamintinus FC 2880 =51.9gm

+seed cache #224 +blood +tissue testes = mm., scrotal
290 ♂ Dipodomys panamintinus FC 2881 =49.3gm

seed ...he #225 +tissue +blood SKULL ONLY +baculum testes = 11x6 mm, scrotal, tub. visib. in caud. epid.
291 ♂ Dipodomys panamintinus FC 2882 279-163-42-15=56.5gm

seed cache #226 +blood + tissue testes = mm., scrotal
292 ♂ Dipodomys panamintinus FC 2883 =67gm

seed cache #227 +blood + tissue vag. open
293 ♀ Dipodomys panamintinus FC 2884 =51.4gm

Captured 27 April - Prepared 6 May

...d ...he ...228 +blood +baculum +tissue testes = mm., abdom.
294 ♂ Dipodomys panamintinus FC 2885 =65gm

...d ...he ...229 +blood + tissue vag. closed
295 ♀ Dipodomys panamintinus FC 2886 =58.3gm

...d ...he ...230 ~~+blood~~ + tissue testes = mm, ± scrotal [died in lab. 5-6 may]
296 ♂ Dipodomys panamintinus FC 2887 =46.6gm

...d ...he ...231 +blood -tissue SKULL ONLY +baculum testes = 7x4 mm., abdom. tail damage
297 ♂ Dipodomys panamintinus FC 2888 229-[120]-43-15=46.5gm

...d ...he 232 +blood -tissue SKULL ONLY +baculum testes = 12x5 mm., scrotal, tub. visib. in caud. epid. tail damage
298 ♂ Dipodomys panamintinus FC 2889 261-[142]-45-16=66.6gm

2.6 mi. S, 6.3 mi. W Randsburg, Kern Co., 2900 ft. California

Captured 17 April - Prepared 6 may

+ seed cache #233 +blood +tissue vag. closed
299 ♀ Dipodomys merriami FC 2769 =34.1gm

3.0 mi N. Mojave, Kern Co., 3100 ft. California

Captured 14 April - Prepared 7 May

+ seed cache #234 +blood +tissue testes = mm., scrotal
300 ♂ Dipodomys merriami FC 2762 =40.2gm

# Catalogue

Hafner, M.S.
1975

3.0 mi. N. Mojave, Kern Co., 3100 ft. California

Captured 14 April ~ Prepared 7 May

| Seed cache | Extras | No. | Specimen | FC | Notes / Measurements |
|---|---|---|---|---|---|
| ed …che …35 | +blood +tissue | 301 | ♀ Dipodomys merriami | FC 2763 | vag. closed; =39 gm |
| ed …che …236 | +blood, tissue SKULL ONLY | 302 | ♀ Dipodomys panamintinus | FC 2877 | vag. closed, null., ovaries 2x1 mm; 224 - 130 - 39 - 13 = 30.8 gm |
| eed …che …237 | +blood +tissue | 303 | ♀ Dipodomys merriami | FC 2764 | vag. closed; =42.8 gm |
| seed …che …38 | +blood +tissue | 304 | ♂ Dipodomys merriami | FC 2765 | testes = mm., scrotal; =44 gm |
| seed cache #239 | +blood +tissue | 305 | ♂ Dipodomys merriami | FC 2766 | testes = mm., ± scrotal; =39.8 gm |
| ~~seed cache #240~~ | ~~+blood~~ | ~~306~~ | ~~Dipodomys merriami~~ | | ~~m.s.#~~ |

5 mi. E. California City, Kern Co. 2500 ft. California

Captured 17 April - Prepared 9 May

| Seed cache | Extras | No. | Specimen | FC | Notes / Measurements |
|---|---|---|---|---|---|
| +seed cache #246 | +blood +tissue | 306 | ♂ Dipodomys merriami | FC 2767 | testes = mm., abdom.; =36.5 gm |
| +seed …che #247 | +blood +tissue | 307 | ♀ Dipodomys merriami | FC 2768 | vag. closed; =30.8 gm |

2 mi. E. Searles Station, 9 mi. NNE Johannesburg, 3200 ft.
San Bernardino Co., California

Captured 26 April - Prepared 9 May

| Seed cache | Extras | No. | Specimen | FC | Notes / Measurements |
|---|---|---|---|---|---|
| …ed …che #248 | +blood +tissue | 308 | ♂ Dipodomys panamintinus | FC 2839 | testes = mm., abdom.; =54 gm |
| …ed …che …249 | +blood +tissue | 309 | ♂ Dipodomys panamintinus | FC 2840 | testes = mm., abdom.; =59 gm |
| …eed …che …250 | +blood +tissue | 310 | ♂ Dipodomys panamintinus | FC 2841 | testes = mm. abdom.; =65 gm |
| …seed cache #251 | +blood +tissue | 311 | ♂ Dipodomys panamintinus | FC 2842 | testes = mm., abdom.; =48 gm |
| …eed …ache …252 | +blood +tissue | 312 | ♀ Dipodomys panamintinus | FC 2843 | vag. closed, swollen; =36.7 gm |
| …seed …ache …253 | +blood +tissue | 313 | ♂ Dipodomys panamintinus | FC 2844 | testes = mm., abdom.; =53 gm |
| +seed cache #254 | +blood +tissue | 314 | ♂ Dipodomys panamintinus | FC 2845 | testes = mm., ± scrotal; =42.3 gm |
| +seed cache #255 | +blood +tissue | 315 | ♂ Dipodomys panamintinus | FC 2846 | testes = mm., abdom.; =45.8 gm |
| +seed cache #256 | +blood +tissue | 316 | ♀ Dipodomys panamintinus | FC 2847 | vag. closed; =43.5 gm |
| +seed cache #257 | +blood +tissue | 317 | ♂ Dipodomys panamintinus | FC 2848 | testes = mm., abdom.; =52 gm |
| +seed cache #258 | +blood +tissue | 318 | ♀ Dipodomys panamintinus | FC 2849 | vag. closed, swollen; =41 gm |

# Catalogue

Hafner, M.S.
1975

2 mi. E. Searles Station, 9 mi. NNE Johannesburg, 3200 ft.;
San Bernardino Co., California

Captured 26 April - Prepared 11 May

seed cache #259 +blood +tissue **319** ♀ Dipodomys panamintinus (vag. closed) FC 2850 =33gm.

3.9 mi. by road, E. Walker Pass Summit, 10 mi. W. Inyokern
4700 ft., Kern Co., California

Captured 27 April - Prepared 11 May

seed cache #260 SKELETON ONLY ~~+blood~~ +tissue +glans **320** ♂ Peromyscus maniculatus (testes = 7x4 mm., abdom., SV=10mm.) FC 3024 136-57-20-15 = 14.5gm

seed cache #261 ~~+blood~~ SKELETON ONLY +tissue +glans **321** ♂ Peromyscus maniculatus (testes = 8x4 mm., ± scrotal, SV=9mm.) FC 3025 143-65-20-16 = 14.5gm

+seed cache #262 SKELETON ONLY ~~+blood~~ +tissue +glans **322** ♂ Peromyscus maniculatus (testes = 7x5 mm., scrotal; SV=8mm.) FC 3026 144-62-20-22 = 15gm

0.15 mi. E. Walker Pass Summit, 11 mi. W. Inyokern, Kern Co.
4700 ft., California

Captured 27 April - Prepared 11 May

seed cache #263 SKELETON ONLY ~~+blood~~ +tissue **323** ♀ Peromyscus maniculatus (vag. closed, uterus swollen) FC 3027 127-56-19-15 = 12.5gm.

seed cache #264 SKELETON ONLY +tissue +glans **324** ♂ Peromyscus maniculatus (testes - ? mm., abdom. SV<10 mm., tub. visib. in cauda. epid.) FC 3028 149-64-20-18 = 19gm

seed cache #265 SKELETON ONLY +tissue +glans **325** ♂ Peromyscus maniculatus (testes = 9x4 mm., abdom.) FC 3029 149-69-21-23 = 14.8gm

seed cache #266 SKELETON ONLY +tissue +glans **326** ♂ Peromyscus maniculatus (testes = 9x5 mm., abdom.; tub. visib in caud. epid.) FC 3030 160-77-21-17 = 18 gm

seed cache #267 SKELETON ONLY +tissue **327** ♀ Peromyscus maniculatus (vag. open, uterus much swollen, no visib. embryos) FC 3031 135-55-20-16 = 13gm

+seed cache #268 SKELETON ONLY +tissue +glans **328** ♂ Peromyscus maniculatus (testes = 9x5 mm., abdom. SV = 14 mm., tub. visib. in caud. epid.) FC 3032 155-67-20-16 = 19.5gm

+seed cache #269 SKELETON ONLY +tissue +glans **329** ♂ Peromyscus maniculatus (testes = 4x2 mm, abdom.) FC 3033 138-62-21-16 = 11.2gm

seed cache #270 SKELETON ONLY +tissue **330** ♀ Peromyscus maniculatus (vag. open, uterus., no scars.) FC 3034 140-60-20-16 = 14.3gm

+seed cache #272 + larynx SKELETON ONLY +tissue +glans **331** ♂ Peromyscus maniculatus (testes = 8x4 mm., abdom., SV=9mm., tub. visib. in caud. epid.) FC 3035 155-67-20-17 = 19gm

+seed cache #273 SKELETON ONLY +tissue +glans **332** ♂ Peromyscus maniculatus (testes = 10x6 mm., abdom. SV. = 7 mm.) FC 3036 149-66-21-17 = 15.2gm

1.1 mi. by road E. Walker Pass summit, 10 mi. W. Inyokern, 4700' ~~400~~, Kern Co., California

Captured 27 April - Prepared 13 May

+seed cache # ~~273~~ 277 SKELETON ONLY +tissue +glans **333** ♂ Peromyscus maniculatus (testes = ? mm., abdom., SV = 8 mm.) FC 3037 139-67-20-16 = 17.8gm.

# Catalogue

Hafner, M.S.
1975

1.1 mi. by road E. of Walker Pass Summit, 10 mi. W. Inyokern, 4700 ft., Kern Co., California.

Captured 27 April – Prepared 13 May (con't)

SKELETON ONLY + tissue ~~274~~ 275 — 334 ♀ *Peromyscus maniculatus* — vag. closed, uterus thick, swollen — FC 3038 — 133-62-21-15 = 13.1 gm

SKELETON ONLY + tissue + glans ~~275~~ 276 — 335 ♂ *Peromyscus maniculatus* — testes = 9x5 mm., abdom. SV = 9 mm. — FC 3039 — 152-65-20-15 = 21 gm

SKELETON ONLY + tissue + glans — 336 ♂ *Peromyscus maniculatus* — testes = 10x5 mm., abdom. tub. visib. in caud. epid. SV = 8 mm. — FC 3040 — 152-69-21-16 = 20.2 gm

2.6 mi. S., 6.3 mi. W. Randsburg, Kern Co., 2900 ft., California.

Captured 20 April – Prepared 16 May.

+ blood + tissue SKULL ONLY — 337 ♀ *Perognathus formosus* — vag. closed, null. — FC 2948 — 178-100-24-12 = 17 gm

+ blood + tissue SKULL ONLY + baculum — 338 ♂ *Perognathus formosus* — testes = 5x3 mm., abdom. — FC 2949 — 150-[70]-25-11 = 19 gm (tail damaged)

+ blood + tissue SKULL ONLY — 339 ♀ *Perognathus formosus* — ~~test~~ vag. closed, uterus swollen, no emb., no scars, pelvis notched — FC 2950 — 178-101-24-12 = 16 gm

+ blood + tissue SKULL ONLY — 340 ♀ *Perognathus formosus* — vag. closed, scars (2 gen.) 4R-2L are recent — FC 2951 — 172-85-25-12 = 20.8 gm

+ blood + tissue SKULL ONLY — 341 ♀ *Perognathus formosus* — vag. closed, no emb., no scars, pelvis notched — FC 2952 — 176-98-24-11 = 20.2 gm

+ blood + tissue SKULL ONLY — 342 ♀ *Perognathus formosus* — vag. closed, no emb., no scars [nulliparous] — FC 2953 — 174-92-24-12 = 19.8 gm

+ blood + tissue SKULL ONLY — 343 ♀ *Perognathus formosus* — vag. closed, [no repro. info.] pelvis notched — FC 2954 — 182-100-25-11 = 19 gm

+ blood + tissue SKULL ONLY — 344 ♀ *Perognathus formosus* — vag. closed, no emb., no scars. — FC 2955 — 172-[92]-24-12 = 20 gm (tail damaged)

11 mi. by road E. of Walker Pass Summit, 10 mi. W. Inyokern, 4700 ft., Kern Co., California

Captured 27 April – Prepared 18 May

+ blood + tissue SKELETON + baculum — 345 ♂ *Perognathus xanthonotus* — testes = 7x5 mm., abdom. — FC 3015 — 163-85-23-9 = 16 gm

? 346

SKELETON ONLY + tissue + glans — 347 ♂ *Peromyscus maniculatus* — testes = 11x5 mm., abdom. SV. = 8 mm. — FC 3041 — 170-77-20-17 = 18 gm

2.6 mi. S., 6.3 mi. W. Randsburg, Kern Co., 2900 ft. California

Captured 20 April – Prepared 19 May

+ tissue SKULL ONLY — 348 ♀ *Perognathus* ~~formosus~~ *longimembris* — vag. closed, no emb. — FC 2985 — 129-71-19-7 = 6.8 gm

+ tissue SKULL ONLY + baculum — 349 ♂ *Perognathus* ~~formosus~~ *longimembris* — testes = 3x2 mm., abdom. — FC 2986 — 120-[59]-18-7 = 8.1 gm (tail damaged)

# Catalogue

Hafner, M.S.
1975

2.6 mi. S., 6.3 mi. W. Randsburg, Kern Co., 2900 ft California

Captured 20 April - Prepared 19 May

+ blood ✓ SKULL ONLY + tissue 350 ♀ *Perognathus longimembris* — vag. closed, recent scars: 3R-1L — FC 2987 — 128-69-19-7 = 8.3 gm

✓ SKULL ONLY + tissue 351 ♀ *Perognathus longimembris* — vag. closed, uterus swollen, red. — FC 2988 — 130-71-20-7 = 8 gm

SKULL ONLY + tissue + baculum 352 ♂ *Perognathus longimembris* — testes = 3×1 mm, abdom. — FC 2989 — 139-74-20-7 = 8.5 gm

+ tissue SKULL ONLY + baculum 353 ♂ *Perognathus longimembris* — testes = 3×2 mm, abdom., tub. visib. in caud. epid. — FC 2990 — 133-73-19-7 = 8 gm

2 mi. E. Searles Station, 9 mi. NNE Johannesburg, 3200 ft.
San Bernardino Co., California

Captured 26 April - Prepared 12 June

+ sperm + tissue 354 ♂ *Dipodomys panamintinus* — testes = mm., — FC 2851 — = no wt.

Captured 26 April - Prepared 21 June

+ tissue 355 ♀ *Dipodomys panamintinus* — vag. closed — FC 2852 — = no wt.

+ tissue 356 ♀ *Dipodomys panamintinus* — vag. closed — FC 2853 — = no wt.

+ tissue 357 ♂ *Dipodomys panamintinus* — testes = mm., scrotal — FC 2854 — = no. wt.

+ tissue 358 ♀ *Dipodomys panamintinus* — vag. closed — FC 2855 — = no wt.

+ tissue 359 ♀ *Dipodomys panamintinus* — vag. closed — FC 2856 — = no. wt.

+ tissue 360 ♂ *Dipodomys panamintinus* — testes = mm, abdom — FC 2857 — = no. wt.

• + tissue 361 ♀ *Dipodomys merriami* — vag. closed — FC 2774 — = no. wt.

+ tissue 362 ♂ *Dipodomys merriami* — testes = mm., scrotal — FC 2775 — = no. wt.

+ tissue 363 ♂ *Dipodomys merriami* — testes = mm., abdom. — FC 2776 — = no wt.

+ tissue 364 ♀ *Dipodomys panamintinus* — vag. closed — FC 2858 — = no wt.

+ tissue 365 ♂ *Dipodomys panamintinus* — testes = mm, abdom. — FC 2859 — = no wt.

+ tissue 366 ♀ *Dipodomys merriami* — vag. closed — FC 2777 — = no. wt.

+ tissue 367 ♀ *Dipodomys merriami* — vag. closed, swollen — FC 2778 — = no wt.

+ tissue 368 ♂ *Dipodomys panamintinus* — testes = mm, scrotal — FC 2860 — = no wt.

+ tissue 369 ♀ *Dipodomys merriami* — vag. closed — FC 2779 — = no wt.

# Catalogue

Hafner, M. S.
1975

2.0 mi. E. Searles Station, 9.0 mi. NNE Johannesburg, San Bernardino Co., 3200 ft., California

Captured 26 April - Prepared 21 June

+ tissue
370 ♂ Dipodomys panamintinus FC 2861 — testes = mm, scrotal = [no wt.]
+ tissue
371 ♂ Dipodomys merriami FC 2780 — testes = mm, scrotal = [" "]
+ tissue
372 ♂ Dipodomys merriami FC 2781 — testes = mm, scrotal = [" "]
+ tissue "
373 ♂ Dipodomys panamintinus FC 2862 — testes = mm, abdom. = [" "]
+ tissue
374 ♀ Dipodomys panamintinus FC 2863 — vag. closed = [" "]

5 mi. E. California City, Kern Co. 2500 ft., California

Captured 17 April - Prepared 21 June

375 ♀ Dipodomys merriami — vag. closed = [" "]
376 ♂ Dipodomys merriami — testes = mm, scrotal = [" "]
377 ♀ Dipodomys merriami — vag, closed = [" "]
378 ♀ Dipodomys merriami — vag. closed = [" "]
379 ♂ Dipodomys merriami — testes = mm, scrotal = [" "]
380 ♂ Dipodomys merriami — testes = mm, abdom. = [" "]

3.0 mi. N. Mojave, Kern Co., 3100 ft. California

Captured 14 April - Prepared 22 June

381 ♀ Dipodomys merriami — vag. closed, swollen = [" "]
SKULL ONLY +baculum (✓)
382 ♂ Perognathus formosus FC 2978 174-97-25-11 — testes = 6x2 mm, abdom. = [" "]
SKULL ONLY (✓)
383 ♀ Perognathus formosus FC 2979 183-101-25-11 — vag. closed, [no repro. info] = [" "]

2.0 mi. E. Searles Station, 9.0 mi. NNE Johannesburg, San Bernardino Co., 3200 ft., California

Captured 26 April - Prepared 22 June

+ tissue (✓) SKULL ONLY +baculum
384 ♂ Perognathus formosus FC 2980 179-98-25-12 — testes = 5x2 mm., abdom. = [no wt.]
+ tissue (✓) SKULL ONLY +baculum
385 ♂ Perognathus longimembris FC 3014 133-69-19-7 — testes = 4x3 mm, abdom = [" "]

# Catalogue

Hufner, M.S.
1975

2.0 mi. E. Searles Station, 9.0 mi NNE Johannesburg,
San Bernardino Co., 3200 ft. California

Captured 26 April – Prepared 22 June

+ tissue
386 ♂ Dipodomys panamintinus (testes = mm, abdom) FC 2864 =[no wt.]
387 ♂ Dipodomys merriami (testes = mm, ± scrotal.) =[" "]

N. side hwy 58, 6.8 mi (by road) NW Mojave, Kern
Co., California 3700 ft. [[illegible]32S, R35E]

Captured 4 April – Prepared 22 June

SKELETON ONLY + tissue + glans (✓)
388 ♂ Peromyscus truei (testes = 7 x 4 mm., abdom.) FC 3043 183-98-24-25 =[" "]

SKELETON ONLY + tissue + glans (✓)
389 ♂ Peromyscus truei (testes = 7 x 4 mm, abdom.) FC 3044 179-[80]-24-23 =[" "] (tail damaged?)

SKELETON ONLY + larynx + tissue (✓)
390 ♀ Peromyscus maniculatus (vag. closed, uterus red, swollen) FC 3042 136-57-20-16 =[" "]

S. of Corral Hollow Road, 7 mi. S, 1 mi. W Tracy, San
Joaquin Co., California

20 August

Alc. 391 Uta stansburiana TL=145 SV=54
Alc. 392 Uta stansburiana TL=63 SV=28
Alc. 393 Uta stansburiana TL=135 SV=55
Alc. 394 Uta stansburiana TL=133 SV=53
Alc. 395 Uta stansburiana TL=116 SV=52
Alc. 396 Uta stansburiana TL=82 SV=29
Alc. 397 Uta stansburiana TL=95 SV=48
Alc. 398 Uta stansburiana TL=67 SV=29
Alc. 399 Uta stansburiana TL=93 SV=45
Alc. 400 Uta stansburiana TL=116 SV=46
Alc. 401 Uta stansburiana TL=93 SV=32
Alc. 402 Uta stansburiana TL=79 SV=27

# Catalogue

Hafner, M. S.
1975

S. of Corral Hollow road, 7 mi. S, 1 mi. W. Tracy, San Joaquin Co., California

20 August

20 August (con't)

Alc. 403 Uta stansburiana TL=112 SV=39

Alc. 404 Uta stansburiana TL=85 SV=47

Alc. 405 Uta stansburiana TL=125 SV=47

5 mi. E. California City, Kern Co., 2500 ft. California

5 April

Skeleton only 406 ♀ Perognathus longimembris (no emb., no scars, vag. closed.) 123-71-19-6 = 5.8 gm

Skull only 407 ♂ Perognathus longimembris (testes = 3.5 mm., abdom.) 140-78-21-6 = no wt. skull damaged (by anychomys ?)

Skeleton only 408 ♂ Perognathus longimembris (testes = 3 mm, abdom.) 133-73-19-7 = 8 gm.

Skeleton only 409 ♀ Perognathus formosus (vag. closed; no emb., no scars) 170-96-24-10 = 17 gm.

Skeleton only 410 ♀ Perognathus formosus (vag. closed, no emb.; scars: 8R-6L) 170-86-25-11 = 20.5 gm (tail damaged)

Skeleton only 411 ♂ Perognathus formosus (testes = 4 mm.; abdom.) 167-93-25-10 = 16 gm

Skeleton only 412 ♂ Perognathus formosus (testes = 5 mm; abdom.) 150-68-24-11 = 17 gm (tail damaged)

Skeleton only 413 ♀ Perognathus formosus (vag. closed; no emb.; no scars) 179-99-24-11 = 17 gm

Skeleton only 414 ♀ Perognathus formosus (vag. closed; no emb.; no scars) 182-108-26-11 = 18.5 gm

Skeleton only 415 ♀ Perognathus formosus (vag. closed; no emb., no scars) 183-105-24-11 = 19 gm

Skeleton only 416 ♀ Dipodomys merriami (vag. closed; emb: 2R-1L = 7 mm.) 245-150-37-13 = 37 gm

Skeleton only 417 ♀ Dipodomys merriami (vag. open; swollen; no emb., no scars) 229-135-36-14 = 37 gm

9.5 mi. NNE Johannesburg, 1 mi. E. Trona Rd. San Bernardino Co., 3200 ft. California

19 April 1974 (prepared 23 Aug. 1975)

Skeleton only 418 ♂ Peromyscus (testes = 5 mm., abdom.) 151-85-18-18 = 12 gm

Skeleton only 419 ♀ Peromyscus (vag. open, emb: 1L-3R = 5 mm.) ( " " " ) 165-90-18-17 = 17 gm

Skeleton only 420 ♂ Peromyscus (testes = 9.0 mm., scrotal) ( ) 169-86-18-16 = 16 gm

# Catalogue

Hayner. M.S.
1975

9.5 mi. NNE Johannesburg, 1 mi. E. of Trona Rd., San Bernardino Co., California. 3200 ft.

19 April 1974 (con't) (prepared 23 August 1975)

| | | | |
|---|---|---|---|
| skeleton only | 421 | ♂ Peromyscus (crinitus or eremicus) — testes = 5 mm, abdom. | 151-76-18-17=12gm |
| skeleton only | 422 | ♂ Peromyscus (maniculatus) — testes = 10 mm, scrotal; tub. visib. in epid. | 180-83-20-18=26gm |

20 April 1974 (prepared 23 August 1975)

| | | | |
|---|---|---|---|
| skeleton only | 423 | ♀ Perognathus longimembris — vag. open; uterus swollen; nipple wear | 137-70-19-7=12gm |
| skeleton only | 424 | ♀ Perognathus longimembris — vag. open (no reprod. info.) | 125-72-19-6=7.5gm |
| skeleton only | 425 | ♀ Perognathus longimembris — vag. open (" " ") | 134-71-19-7=12.5gm |
| skeleton only | 426 | ♀ Perognathus longimembris — vag. closed; no emb., scars 5R-4L | 127-66-18-6=10gm |
| skeleton only | 427 | ♀ Perognathus longimembris — vag. closed; (no reprod. info.) | 131-78-19-6=10gm |
| skeleton only | 428 | ♂ Perognathus longimembris — testes = 3.5 mm; abdom. | 131-74-18-6=7.5gm |
| skeleton only | 429 | ♂ Perognathus longimembris — testes = 4.5 mm; abdom. | 130-70-18-6=10.5gm |
| skeleton only | 430 | ♂ Perognathus longimembris — testes = 4 mm, abdom., tub. visib. in epid. | 132-73-19-6=8gm |
| skeleton only | 431 | ♀ Perognathus longimembris — vag. closed, (no reprod. info.) | 137-82-19-7=12gm |
| skeleton only | 432 | ♀ Perognathus longimembris — vag. open (no reprod. info.) | (tail damaged) 90-24-18-7=10gm |
| skeleton only | 433 | ♀ Perognathus longimembris — vag. open (" " ") | 139-73-18-7=11.5gm |
| skeleton only | 434 | ♀ Perognathus longimembris — vag. closed, emb. 2R-2L = 14 mm. | 123-68-18-6=9gm |
| skeleton only | 435 | ♂ Perognathus longimembris — testes = 3 mm, abdom. | 129-71-18-7=9gm |
| skeleton only | 436 | ♀ Perognathus formosus — vag. closed, lactating; scars 3R-3L | 190-111-24-12=23gm |
| skeleton only | 437 | ♂ Perognathus formosus — testes = 6 mm, abdom. | (tail damaged) 169-84-25-12=20gm |
| skeleton only | 438 | ♂ Dipodomys merriami — testes = 12 mm, scrotal, tub. visib. in epid. | (skull damaged) 254-153-39-14=40gm |
| skeleton only | 439 | ♀ Dipodomys merriami — vag. open, uterus swollen; no emb., no scars | 210-120-35-13=31gm |
| skeleton only | 440 | ♂ Dipodomys merriami — testes = 10 mm, scrotal, tub. visib. in epid. | 237-143-37-14=54gm |
| skeleton only | 441 | ♂ Dipodomys merriami — testes = 11 mm, scrotal, tub. visib. in epid. | 270-163-39-15=56gm |
| skeleton only | 442 | ♂ Ammospermophilus leucurus — testes = mm, scrotal | 222-65-36-11=125gm |

# Catalogue

Hafner, M.S.
1975

9.5 mi. NNE Johannesburg, 1 mi. E. of Trona Road, San Bernardino Co., California, 3200 ft.

19 April 1974 (con't from top of last page)

Skeleton only ✓ 443 ♀ *Peromyscus maniculatus* (vag. closed; emb. = 4R-3L = 3mm.) 145-59-18-16=17 gm

2 mi. E. Searles Station, 9 mi. NNE Johannesburg, San Bernardino Co., 3200 ft., California (Camp 1)

29 September 1974

Skeleton only ✓ 444 ♀ *Onychomys torridus* (vag. open (no reprod. info.)) DIED IN LAB 10 APRIL 1975 120-45-20-15 = 12.5 gm

Skull only ✓ 445 ♂ *Onychomys torridus* (testes abdom.) DIED IN LAB 7 APRIL 1975 125-45-19-16 = 14 gm

12 January (1975)

Skeleton only 446 ♀ *Dipodomys merriami* (vag. open, uterus swollen, no embryos) DIED IN LAB 12 FEB. 1975 240-142-37-14=34 gm

26 January

Alc. ✓ 447 ♀ *Onychomys torridus* (vag. open. (mother of MSH 448, 449, 450)) 128-45-18-15=20 gm

Alc. ✓ 448 ♂ *Onychomys torridus* (juv. young of MSH 447) 65-18-13-8= 3 gm

Alc. ✓ 449 ♀ *Onychomys torridus* (juv. (" " ")) 67-19-13-8 =3.8 gm

Alc. ✓ 450 ♀ *Onychomys torridus* (juv. (" " ")) 66-19-12-8= 3 gm

Skull only ✓ 451 ♂ *Onychomys torridus* (testes = 12 mm, ± scrotal) 123-43-19-15=20 gm

22 February

Skeleton only ✓ 452 ♂ *Perognathus formosus* (testes = 6. mm, abdom.) (tail damaged) 135-52-24-10=18 gm

Skeleton only ✓ 453 ♀ *Onychomys torridus* (vag. closed, emb.: 3R-2L = 2mm.) 137-51-19-15=20 gm

Skeleton only ✓ 454 ♀ *Dipodomys panamintinus* (vag. closed, uterus swollen; lactating) 281-160-42-15=70 gm

Skeleton only ✓ 455 ♂ *Dipodomys panamintinus* (testes = 13 mm, abdom, tub. visib. in epid.) 302-179-44-15=79 gm

(Locality as above)

19 January

~~Skeleton~~ Skull only ✓ 456 ♀ *Dipodomys panamintinus* (vag. closed (no reprod. info.)) 257-149-38-14=~~26~~ =26 g MSH ~~42 gm at capture~~

# Catalogue

Hafner, M.S.
1975

Sand Canyon, 0.4 mi. N. Hwy 58, 2.9 mi. E x S. Monolith, Kern Co., California, 3949 ft. (T32S, R34E, NW 1/4 sec 27).

26 January

vag. closed (no reprod. info.)
Skeleton only Skull 457 ♀ Dipodomys panamintinus 290-179-43-12=63g.
vag. closed (" " ")
~~Skeleton~~ Skull only 458 ♀ Dipodomys panamintinus 285-165-42-13=67g.

2.6 mi. S, 6.3 mi. W. Randsburg, 2900 ft., Kern Co., California

9 April

vag. closed, no emb., no scars
Skeleton only 459 ♀ Perognathus formosus 194-114-25-11=18gm
testes = 5 mm, abdom.
Skeleton only 460 ♂ Perognathus formosus 184-113-25-11=17gm
testes = 4 mm, abdom.
Skeleton only 461 ♂ Perognathus formosus 180-99-25-11=18gm
Skeleton only 462 Perognathus longimembris 135-79-19-7=7gm

~~463~~ 13.6 mi. N (by road) Sutcliffe, Washoe Co, Nevada

4 September 1975

463 Scaphiopus intermontanus

8.6 mi. (by road) N. Nixon, Washoe Co., Nevada

4 September (con't)

* = Texas Tech. karyotype coll.

testes = 3.5 mm.
+ chrom. + tissue + pt. skel. 464 ♂ Microdipodops pallidus *TK 5665 147-84-25-9=[no wt.]

26 mi. W, 14 mi. N. Lovelock, Pershing Co., Nevada 4100 ft.

5 September

testes = 2.5 mm.
+ chrom + tissue + skel (part.) 465 ♂ Microdipodops megacephalus TK 5666 157-92-25-9.5=(no wt.)
vag. closed, no emb. no scars
+ chrom + tissue + skel. (pt.) 466 ♀ Microdipodops megacephalus TK 5667 151-89-25-10.5=(no wt.)
vag. closed, no emb.
ALCOHOLIC 467 ♀ Microdipodops megacephalus 151-89-24-10=(no wt.)
vag. closed, nulliparous
ALCOHOLIC 468 ♀ Onychomys torridus 123-53-18-16=(no wt.)

0.6 mi. S. Denio. 4200 ft. Humboldt Co, Nevada.

6 September

testes = 3 mm.
+ chrom. + tissue + pt. skel. 469 ♂ Microdipodops megacephalus TK 5661 151-88-24-9.5=(no wt.)

# Catalogue

Hafner, M.S.
1975

Sagehen Creek, 3.0 mi. NW Hobart Mills, Nevada Co., 6300 ft. California

11 June [coll. by S. Smith]

testes = 9x4 mm, scrotal
470 ♂ Eutamias amoenus 198-74-34-15=48g

18 October

testes: R=7x5, L=4x2 mm, abdom.
471 ♂ Thomomys monticola 201-70-27-10=84g
testes = 7x3 mm, abdom.
472 ♂ Peromyscus maniculatus 169-73-21-17=21g
vag. closed, nulliparous
473 ♀ Eutamias amoenus 192-78-31-16=48g

1.1 mi. E. Vinton, Plumas Co. 5,000 ft, California

19 October

MVZ 149713
testes = 10x5 mm, ± abdom., tub. visib. in caud. epid.
474 ♂ Dipodomys panamintinus 293-170-46-16=82g

Hastings Natural History Reservation, 14 mi. SE Carmel Valley, Monterey Co., 1700 ft., California

22 November

testes = 18x12, abdom. tub. visib. in caud. epid.
475 ♂ Thomomys bottae 223-65-30-9=180g
vag. closed, scars 2R-1L (old) nipples small, pelvis notched uterus ca. 2mm dia.
476 ♀ Peromyscus truei 215-113-25-25=25g
vag. closed, emb. 3L-1R: C-R=4mm.
477 ♀ Neotoma fuscipes 304-138-37-30=145g

9.5 mi. NNE Johannesburg, 1 mi. E. of Trona Rd., San Bernardino Co., 3200 ft., California

24 April 1974

testes = mm, ± scrotal many ticks on ears
+larynx
478 ♂ Onychomys torridus 126-44-19-15=no wt.

22.8 mi. N., 3.6 mi. W. Eureka, 5850 ft., Eureka Co. Nevada

5 September

vag. closed, nulliparous [coll. by D.J. Hafner]
479 ♀ Perognathus parvus 158-86-22-8=12.5g

# Catalogue

Hafner, M.S.
1975-6

7.0 mi. N. Winnemucca, 4600 ft., Humboldt Co., Nevada.

6 September 1975

vag. closed, null.
480 ♀ Perognathus parvus 155-87-22-8=13.5 gm

Concord, Contra Costa Co., California, 400 ft.

28 December 1975

(No's 481-485 found in Costanoan Indian middens)

tary & limb es only 481 Odocoileus (hemionus)

tary & limb es only 482 Cervus (nannodes)

tial skel. entary. 483 Castor canadensis

entary only 484 Spermophilus (beechyi)

entary only 485 Reithrodontomys (megalotis)

Mt. Diablo, W side North Peak, Contra Costa Co., 2000 ft., California.

3 January 1976

baculum ull only 486 ♂ Urocyon cinereoargenteus pick-up. [no meas. - no wt.]

Franklin Canyon Rd., ca. 13 mi. by road from Martinez Contra Costa Co., California.

18 January 1976

ull only 487 ♂ Lepus californicus pick-up [no meas. - no wt.]

9 mi E, 5 mi. N Dos Palos, Merced Co., California

30 January

uterus swollen, no emb. (no scars, ?)
ull only 488 ♀ Canis latrans pick-up. 1150-360-160-120=[no wt.]

1 mi. S, 5.4 mi. W Delano, Kern Co., California, 250 ft.

21 February

skeleton only + baculum 489 ♂ Canis familiaris pick-up. (skeleton + stomach contents) [no meas.]

skull only + baculum 490 ♂ Canis latrans pick-up. [no meas.]

Hafner, M.S.

Journal

1973

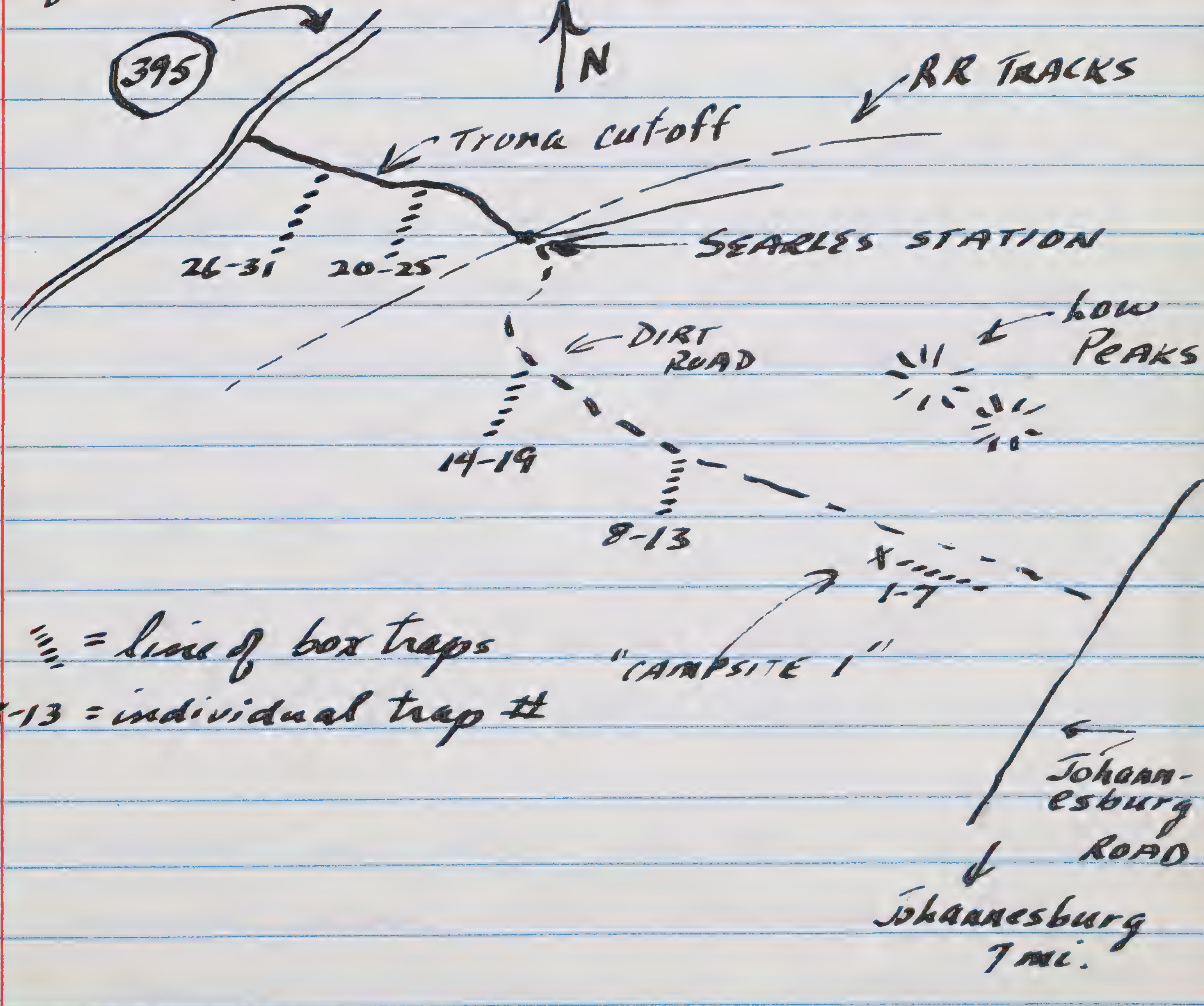
Calif.

Hafner, M.S.
1973

# Journal

"Campsite #1", ~~7~~ 9.5 mi. N. Johannesburg; 1/4 mi W. off of ~~Johannesburg~~ Trona road toward Searles Station, San Bernardino Co. 3200'. Calif.

12 Oct. – Darcey and I left Glendale @ 6:15 PM. Arrived Mojave 8:00 PM. Arrived near Searles Station @ 9:00 PM. Full moon – approx. 55°F. – no wind. Set live box traps (McNeil type) according to map below. Used smear of Peanut Butter and handfull of bird seed mixture for bait.




= line of box traps
8-13 = individual trap #

Hefner, M.S.
1973

# Journal

12 Oct (cont) Off ~~Johannesburg~~ Trona Rd. near Searles Station 9.5 mi N. Johannesburg, San Bernardino Co. Calif. 3200'.

12 Oct. (CONT.) - Traps set in Creosote (*Larrea*) community; bushes varying from 15-30' apart. Much dead plant material around.

14 Oct. - Full moon last night, low approx. 45-50°F.

7:30 AM. Checked traps.

RESULTS:

| TRAP | CAPTURE & CONDITION | DOOR FACING | NEAREST BUSH |
|---|---|---|---|
| 1 | *Perog. longimembris* - semi-torpid | E x S | 2' from *Larrea* |
| 4 | " " Torpid | SE | 3' " " (dead) |
| 6 | 2 " " one dead, other active | NE | 20' " " |

(traps 1-7 in line E. of Campsite #1 - Large *Larrea*, many smaller bushes (eg. *Chrysothamnus*) and Joshua trees (*Yucca*) Traps not mentioned, no capture.)

| TRAP | CAPTURE & CONDITION | DOOR FACING | NEAREST BUSH |
|---|---|---|---|
| 9 | *Perog. long.* active | S | 4' from *Larrea*. |
| 13 | " " semi-torpid | S x W | 1' small, dead bush. |

(traps 8-13, ½ mi W. campsite #1 - Same habitat as 1-7, but no *Yucca*, more rocks)

trap lines 14-19, and 20-25 no catches. much more arid location, less rodent evidence and vegetation.

Hofner, M.S.
1973

# Journal

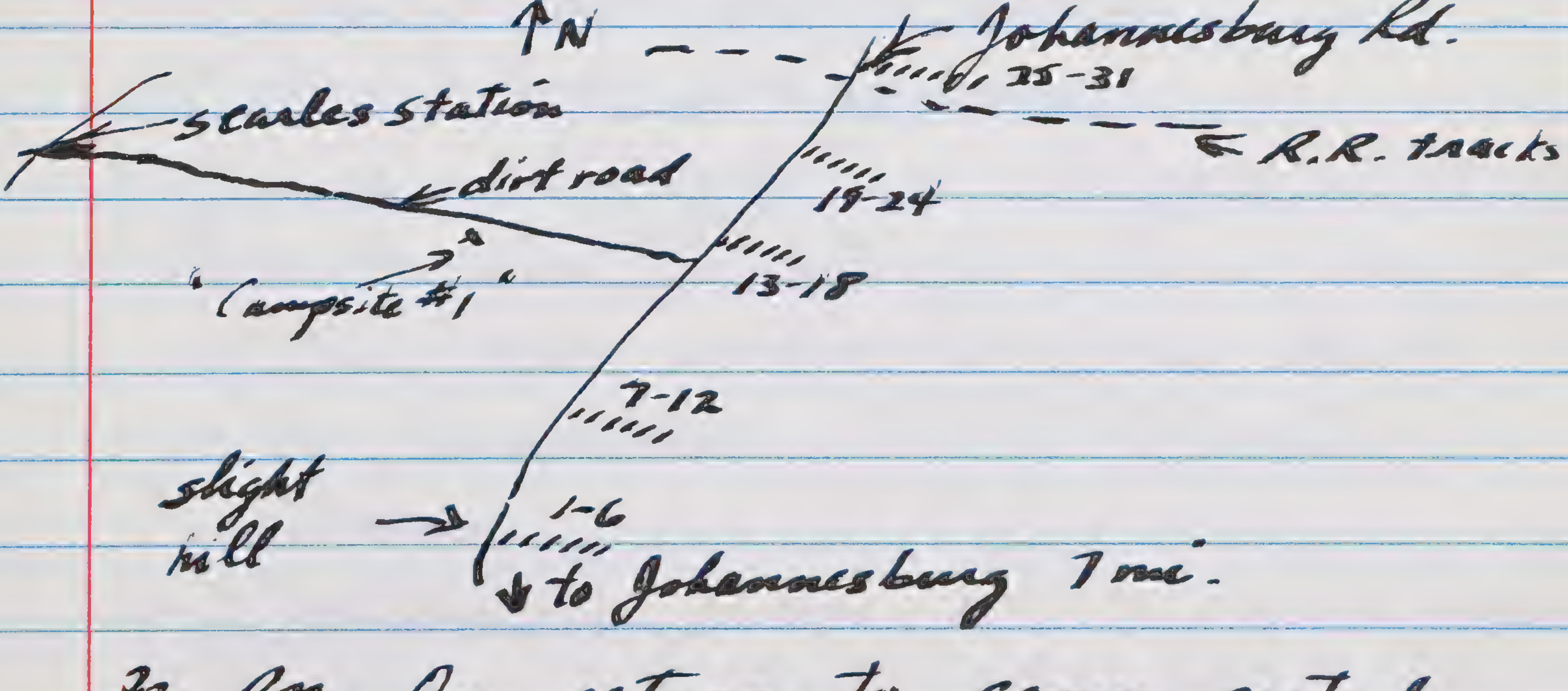
14 OCT (CON'T) Off ~~Johannesburg~~ Trona Rd., near Searles Station ~~7~~ 9.5 mi. N. Johannesburg, San Bernardino Co. Calif. 3200'

14 Oct. (CON'T) -(trapping results con't.)

28 - Perog. long. semi-torpid - S - 2' from Larrea
traps 26-31 sames gen'l habitat as 14-19 and 20-25. - 1/4 mi E. of Highway 395 on Trona Cutoff.

2:00 Pm - reached high temp. of approx. 80° slight breeze in P.M. Noted presence of many Perognathus diggings and unusual number of Tarantella sp.? spiders.

7:00 Pm. Set same traps using same bait as before. (See map.) Sun set approx. 7:30, moon-rise 8:00 Pm.




8:30 PM - On return to camp, noted Dipodomys and young running in front of car - These are first "Dipo's" seen this trip.

Hafner M.S.
1973

# Journal

15 Oct. Off ~~Johannesburg~~ Trona Rd. near Searles Stations
9.5 ~~7~~ mi. N. Johannesburg, San Bernardino Co.
Calif. 3260'.

15 Oct. 7:30 Am - Checked traps - moon still up - overnight temp. same as last night.

Trapping results:

TRAP - CAPTURE - COND. - DOOR FACING - NEAREST BUSH

2 - Dipo. merriami - active - E - 18" from Larrea.
#2 made low, squeeking sounds - low pitched.

1 - Perog. ~~penicillatus~~ formosus - semi-torpid - NE - 4' Larrea

3 - D. merriami and } active - NW - 2' Larrea.
P. long. (dead) } dead Perog. - ear torn, tail missing
much fur missing.

4 - Perog. long. - active - SW - 1' dead "crown of thorns"

5 - D. merriami - active - NW - 2' Larrea.

6 - P. long. - active - SE - 2' Larrea.

7 - P. long. } active - NW - 2' Larrea
P. long. } dead - fur messed

8 - P. long. - killed by Owl - W - 2' from pile sticks
Burrowing Owl (Speotyto cunicularia) caught in this trap; unharmed. Flew slowly away (undulating ~~~~→) when released.

9 - P. ~~penicillatus~~ formosus } active - W - 2' Creosote Larrea
P. long. } dead (characteristic pile
P. long. } dead of fur outside trap)

Hafner, M.S.
1973

# Journal

15 Oct cont. Off ~~Johannesburg~~ Trona Rd. - Near Searles Station
9.5 ~~7~~ mi. N. Johannesburg, San Bernardino Co.
Calif. 3200'

15 Oct. (Con't) Trapping results con't:

10 - P. long. } semi-torpid - SW - Surrounded by
P. long. } " " dead brush.
11 - D. merriami - Active - W - 3' Larrea
12 - P. long. } active - W - 2' Larrea
P. long. } active
13 - D. merriami - Active - E - 2' Larrea
14 - door jammed open - droppings inside
15 - P. ~~penicillatus~~ formosus - semi-torpid NW - 2' Larrea
16 - D. merriami - active - SW - 2' small Larrea
17 - P. long. - active - NW - 3' Larrea
18 - D. panamintinus - Active - SW - Open area small brush
19 - D. panamintinus - Active - SW - 3' Larrea
20 - P. long. - Active - S - 3' Larrea
23 - D. panamintinus - N - 5' Larrea
24 - P. long. - Active - SW - open area - small, dead brush.
P. long. - Very ragged - ½" tail missing
29 - D. merriami - W - 3' Larrea

All of this last set of 7 traps (50 yds north of R.R. tracks) had small area of hardened liquid on top - 1" diameter centered, approx. 4" from one end of trap. The liquid appeared lacquer-like and smelled very musky. (Mustela-like)

Hafner, M.S.
1973

# Journal

Off ~~Johannesburg~~ Trona Rd., near Searles Station
9.5 ~~7~~ mi. N. Johannesburg, San Bernardino Co.
Calif. 3200'

15 Oct. (con't) Trapping results con't:

It should be noted that many traps containing rodents of both Genera had dirt on the apron and inside. Sometimes the Peanut Butter was kicked outside the trap and as much as 1/4" of dirt was inside.

Results of night of Oct. 13-14
Trapping success: 7/31 ≐ 23%
All Perognathus longimembris

Results of night of Oct 14-15
Trapping success: 30/31 ≐ 98%
Perog. long. 16
Perog. ~~[illegible]~~ formosus 3
D. merr. 7
D. pana. 3
Burrowing Owl (Speotyto cunicularia) 1

10:00 AM. - Left trapping area - headed for Glendale via Mojave.

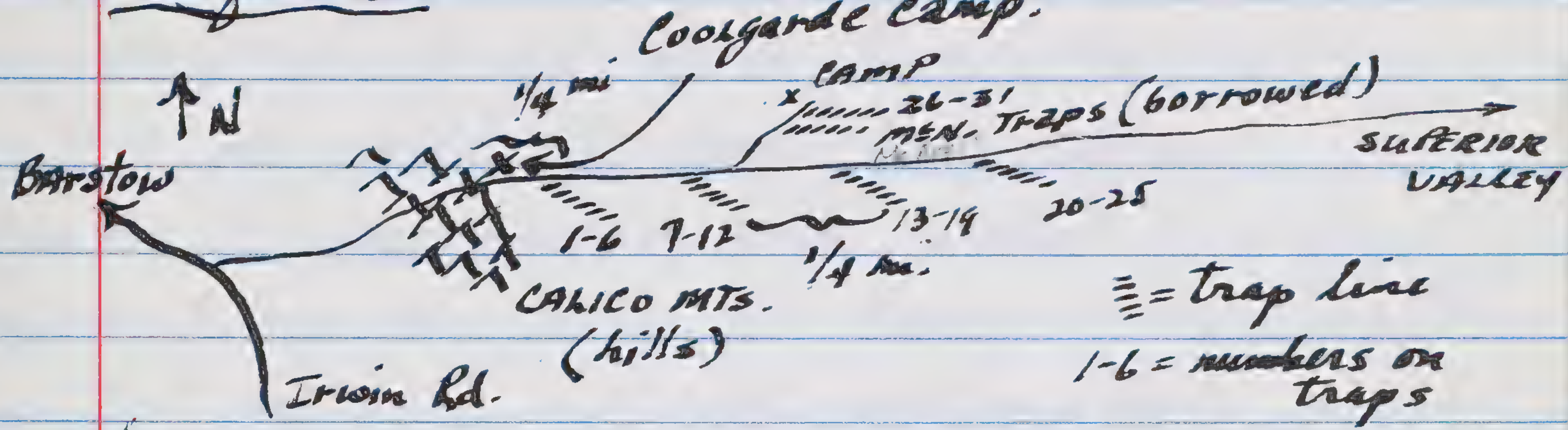
19 Oct. Off Copper City Road, 4 mi from Irwin Road approx. 8 mi. NE of Barstow, San Bernardino Co. Calif. 2105'

Arrived in area 9:30 PM, set traps according to map (on following page), and waited for Barry to meet us

Hafner, M.S.
1973

# Journal

19 Oct. (Con't) Off Copper City Road, 4 mi. from Irwin Rd, approx. 8 mi. NE of Barstow, San Bernardino Co., Calif. 2105'




(Barry arrived about 2:30 AM the next morning)

20 OCT. Off Copper City Rd., 4 mi. from Irwin Rd, approx. 8 mi. NE of Barstow, San Bernardino Co. Calif. 2105'

8:00 AM Checked traps - ½ moon last night moonrise at 1:00 AM. - light breeze, low temp 45° F.

Trapping Results:

wt. — TRAP # — CAPTURE & CONDITION — DOOR OF TRAP FACING: — NEAREST PLANT

170 gm — 26 - Perognathus ~~penicillatus~~ formosus - semi-torpid, W, 6" dead buckbrush

43.9 gm — 27 - Dipodomys merriami - active, E, 6" dead buckbrush dirt in door way

6.6 gm — 28 - Perog. longimembris - active - 1' dead buck brush - much dirt in trap

7.3 gm — 29 - P. l., active, SE, 6" dead buckbrush - dirt in trap

25.0 gm — 31 - P. ~~p~~ f. active, E, 3' dead Larrea, much dirt in trap (½-¾") ½ of tail missing

6.7 gm - McN #4 - P. l. - active - E, 8" dead buckbrush no dirt in trap

6.9 gm McN #14 - P. l. - active - SE, 2' dead buckbrush - little dirt ⅛"

12.3 gm McN #3 - P. l. - active - SW, 6" " " much dirt in trap

6 - P. l. - dead - E - 6" dead buckbrush, skull broken in and brains eaten - mouse laying on apron of trap (outside)

Hafner, M.S.
1973

# Journal

20 Oct. (CON'T) Off Copper City Rd. 4 mi from Irwin Rd. approx. 8 mi. NE of Barstow, San Bernardino Co. Calif. 2105'

6 - (con't) Ground Beetle (Carabidae) feeding on skull of dead Perognathus.

32.8 gm 5 - D. merriami - NE, active, 6" dead buck brush,
7.6 gm 4 - P. long. - imm., active, NE, 1" dead buckbrush (no dirt) no dirt in trap.
7.3 gm 3 - P. long. active, N, 6" small, dead, buck brush, no dirt.
2. - D. panamintinus - active, N, 6" dead, small buck brush no dirt in trap

7.8 gm 1. - P. l. - active, E, 6" small, dead buck brush, no dirt
(Traps 1-6, Very dry area, no large Larrea, no Yucca divericata)
est. 7.6 12 - P. long. active, E, 6" dead, small Larrea - no dirt
8.0 gm 11 - P. long. - active, E, 6" dead buck brush - little dirt
44.0 gm 10 - D. pan. - Subad. - active - E - 6" dead buck brush, no dirt
7.6 gm 9 - P. long. - active - E, 1' dead buckbrush, no dirt
(Traps 7-12 in dry community, few Yucca.)
18 - fur on apron - evidence of fight inside.
17 - P. l. - dead } E, 3' large Larrea, no dirt
38.0 gm D. m. - active - } dead mouse had much blood in abdominal area - not eaten, however
7.1 gm 15 - P. l. - active } N, 3' base large Larrea - no dirt
6.7 gm P. l. - active } evidence of some fighting
5.5 gm 13 - P. l. - active, SE, 3' Larrea, no dirt
(Traps 13-19, Larrea community 30' apart)
8.3 gm 25 - P. l. - active, N, 3' dead buckbrush, no dirt
10.5 gm 24 - P. l. - active, NE, 6" small, dead buckbrush no dirt
7.6 gm 23 - P. l. - active, NW - small dead bush, no dirt
con't

Hafner, M.S.
1973

# Journal

20 Oct. Con't — Off Copper City Rd. 4 mi. from Irwin Rd. Approx. 8 mi. NE. of Barstow, San Bernardino, Co. Calif. 2105'

(2 P.l. in this trap →)

8.0 gm. 23 (con't) P.l. - passive - (See preceeding page)

16.0 gm 22 - P. ~~penicillatus~~ formosus - active, N, 6" dead buckbrush

22.8 gm 21 - P. ~~penicillatus~~ formosus - active } fur on apron. no dirt.

6.5 gm P. long. - dead - } S.W., 3' small buckbrush

12:00 Noon - drove down to Superior Valley, checked around for tortoise evidence, found none - However, 2 sightings of Antelope Ground squirrel (Ammospermophilus leucurus)

6:00 PM - Moved to Coolgarde Camp and set traps as before (50' apart, in sets of 6 or 7 traps - peanut butter & Scattered bird seed bait)

21 Oct. "Coolgarde Camp," ½ mi on dirt road W. of Copper City road, 4 mi from Irwin Rd, approx. 8 mi NE of Barstow, San Bernardino Co. Calif. 2105'

8:00 AM. Checked traps. (Night was wet, with light wind from west - Low ~~45°~~ 40°)

Trapping Results:

#2 - P. long. } semi-torpid, E, 1' Larrea. no dirt.
P. long. } (mice made a "grinding squeek"
P. long. } when disturbed)

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# Journal

21 Oct. "Coolgarde Camp" (Con't)

Trapping results con't.

6 - P. long. } active, W, 2' Larrea. no dirt
P. long. }

5 - P. long. - active } N, 1' Larrea no dirt
P. long. - torpid }

4 - P. long } semi-torpid, E, 2' Larrea
P. long. } no dirt

3 - P. long. - dead } NE, 3' Larrea, no dirt
D. merr. - active }

2 - P. long. - semi-torpid, N, 3' Larrea, dirt on apron.

9 - P. long. - active, SE, 2' Cholla, dirt in trap

10 - P. long. - active - E, 3' Larrea, 1/2" dirt

11 - D. pan. - active, S. 3' Larrea, much dirt

12. - D. pan - active, SE, 4' Larrea

13 - P. long. active, N, between 2 Larrea, 1/4" dirt

18 - D. pan. - active, N, 5' Larrea, dirt on apron

20 - P. long. } semi torpid, N, 1' dead bush
P. long. } no dirt

21. - D. pan. - active } E, 4' Larrea, no dirt
P. long. - dead }

22 - P. long. - torpid SE 4' Larrea 1/4" dirt

23 - P. long - semi-torpid NE no dirt 2' Larrea.

24 - P. long. active NE 3' Larrea no dirt

25 - P. long - active NE, 2' small bush, no dirt

26 - P. long. } torpid, N, 2' small dead bush
P. long } no dirt

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Journal

21 Oct – "Coolgarde Camp" (Con't)
Trapping Results (Con't):
27 – P. long. – active, N, 2' small bush, no dirt
28 – P. long. – active, N, between bushes, no dirt
McN. #3 – P. long. – torpid, N, 3' Larrea, no dirt
McN. 2 – D. pan. – active } S.W. 3' Larrea
P. long. – dead } dirt in trap
McN. 14 – D. pan – active } NW, 3' Larrea.
P. long. – dead } dirt on apron
31 – P. long. – torpid, N, 1" dead bush, dirt on apron

30 – P. long. – active; N; 6" small bush.

10:00 Am – We left trapping area – Barry headed North, we south.
Trapping Success:
Oct 20 : 30/36 = 83%
Oct 21 : 37/36 = 100+ %.

2 Nov. Campsite #1, ~~7~~ 9.5 mi. N of Johannesburg, off ~~Johannesburg~~ Trona Rd, San Bernardino Co. 3200', Calif.
(9:00PM) We met Dr. Luis Baptista, 11 Occidental Students, and Dave and Diane. We set 60 McNeil box traps on either side of Johannesburg road near camp. Very

Hafner ms.
1973

# Journal

2 Nov. (Con't) "Campsite 1", ~~7~~ 9.5 mi. N. of Johannesburg. (Con't)

windy and cold night. David and Diane had set 60 Sherman type traps in Dune area South-West of Trona.

3 Nov. "Campsite 1," ~~7~~ 9.5 mi. N. of Johannesburg, ~~W~~ ~~Johannesburg~~ Trona Rd, San Bernardino Co, 3200' Calif.

6:00 AM - Checked traps - do to general disorganization of trap checking (Oxy students helped) and very windy, cold weather, accurate results were not recorded. David caught a total of 5 *Dipodomys deserti* in two nights trapping (60 x 2 trap nights) No other catches in dunes SW of Trona. The traps near campsite 1 caught mainly *Perognathus longimembris* and a couple *D. merriami*, *D. panamintinus*, and *Perognathus formosus*. Approx. 20% Trapping success - possibly lower than trapping success of Oct 73 due to high winds.

9:00 AM - Went to dunes area and showed class the different habitats found on the desert. David was

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# Journal

3 Nov. (con't) "Campsite 1," 9.5 ~~7~~ mi N Johannesburg (con't)

a very informative "T.A."
10:00 Am - returned to Campsite 1 - Dr. Baptistas' group left area - winds still very high - low temp last night was near freezing due to chill factor.
3:00 Pm - Set traps - 58 ~~60~~ live McNeil type and 60 Sherman type. Traps were set at various distances along Johannesburg Rd., toward Johannesburg in sets of 20 Traps.

4 Nov. "Campsite 1", 9.5 ~~7~~ mi. N Johannesburg, off Trona ~~Johannesburg~~ Rd. San Bernardino Co 3200' Calif.

7:00 Am Checked traps; Results:

14 *Dipodomys merriami*
12 *Dipodomys panamintinus*
9 *Perognathus formosus*
4 *Perognathus longimembris*
1 *Neotoma lepida*
Trapping Success: 40/118 = 34%

4 snap traps set in rocky hill near camp: 1 *Neotoma lepida* and 1 *Peromyscus maniculatus*

{ McNeil traps caught 20 animals
{ Sherman traps caught 20 animals (no longimembris)
Traps were in different localities, however.
2:00 - Left Trapping area - Dave & Diane headed North

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Journal

~~10~~ Nov. 9 Off road to Cuddeback lake, 5 miles east of Atolia, 8 mi. SE of Johannesburg, 3200' San Bernardino Co. Calif.

We arrived here late last night. Full moon, light breeze, approx. 50°F. Set traps at various distances along road to lake in sets of 10. Used live (partially smashed) crickets, peanut butter and grain for bait. 60 traps set.

10 Nov. - Off road to Cuddeback Lake, 5 mi. east of Atolia, 8 mi SE of Johannesburg, 3200' San Bernardino Co. Calif

6:30 Am - Checked traps - fairly nice morning light breeze 55-60°F.

Results:

6 D. merriami — trapping success
1 D. panamintinus — 9/60 = 15%
2 P. longimembris

Habitat was Larrea, 20' apart, soft sand, much quartz rock.

9:00 Am Drove to dry lake and then continued on road SE towards Hy. 58. Noted Indian petroglyphs on rocks along way - much motorcycle activity. Warm, clear day. 75-80°F.

Ammospermophilus leucurus sighted along way.

4:00 Stopped by road approx. 10 miles before

Journal

10 Nov. (con't) -4:00 PM. 15 mi. by road SE of Atolia, 18 mi. SE of Johannesburg, 3200', San Bernardino Co. Calif.

4:00 PM Set traps along road near camp. Many "barrel" cacti near camp, which is in very rocky area adjacent to Larrea habitat in valley.

11 ~~Nov~~ 15 mi. by road SE of Atolia, 18 mi SE of Johannesburg, 3200', San Bernardino Co. Calif.

6:30 AM - Checked traps. Still, moonlight last night.

Results:

14 P. formosus

11 P. longimembris $30/60 = 50\%$

5 D. merriami.

P. long. mostly caught in smoother, sandy micro-habitat, P. formosus caught within 50 yds of P. long, but in rocky, gravel, substrate.

10:00 AM - Drove out heading SW on road and met main hy. 58 and 395 at Cramer Junction. No Onychomys yet.

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# Journal

23 Nov - "Campsite #1," ~~7~~ 9.5 mi. N. Johannesburg, off ~~Johannesburg~~ Trona Rd., San Bernardino Co. 3200' Calif.
8:30 PM. - Met McNeils and set traps near camp (50) and across Johannesburg Rd. as before (see 14 oct 73) ~~60~~ 63 traps. Very cold and windy (approx. 32°F) no moon, clear.

24 Nov. - "Campsite #1", ~~7~~ 9.5 mi. N. Johannesburg, off ~~Johannesburg~~ Trona Rd., San Bernardino Co. 3200'
9:30 AM - Very cold morning - upper surface of soil frozen. Checked traps with following results:

12 Dipodomys merriami
14 Dipodomys panamintinus
10 Perognathus longimembris
2 Perognathus formosus
2 Peromyscus maniculatus
1 Ammospermophilus leucurus

trapping success: 41/113 ≐ 35%

Occasional sunshine through day - temp. varied from 40°F in shade to 57°F in direct sun.
5:00 PM - Heavy rain lasted for 1½ hours. (no more rain entire trip)
(3:00-5:00) Set traps as per following:

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# Journal

25 Nov. - "Campsite #1", ~~7~~ 9.5 mi. N. Johannesburg, ~~Rd~~, off ~~Johannesburg~~ Trona Rd. San Bernardino Co, 3200' Calif.

Set traps yesterday afternoon in groups of 20, at roughly even intervals between Campsite #1 and the intersection of Johannesburg road and the highway between Ridgecrest and Trona. This gave a representative trapping of both the *Larrea* dominant community and the *Atriplex* dominant community. (and intervals in between). As mentioned above, it rained for 1 1/2 hours last evening which might explain the poor results:

5 *Dipodomys merriami*
2 *Ammospermophilus leucurus*

The *Dipo.*'s were caught in the *Larrea* community, though there was *Dipo.* evidence in both communities. One squirrel was caught in each community - at the two extremes of the trapping area.

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# Journal

7 Dec. - "Campsite #1", ~~7~~ 9.5 mi. N. Johannesburg, off of ~~Johannesburg~~ Trona Rd., San Bernardino Co, 3200' Calif.

Arrived at camp 9:00 PM and set 100 traps as before (see 14 Oct '73). Full moon, still, 30-35°F.

8 Dec. - Campsite #1, ~~7~~ 9.5 mi. N. Johannesburg, off ~~Johannesburg~~ Trona Rd., San Bernardino Co, 3200' Calif.

3:00 AM - Checked traps and released animals. Results:

10 *Dipodomys merriami*
2 *Dipodomys panamintinus*
~~3~~ 4 *Perognathus longimembris*
2 *P. formosus*

18/100 = 18%

8:30 AM. - Checked traps again with following results:

5 *D. panamintinus*
4 *D. merriami* 11/100 = 11%
1 *P. longimembris*
1 (♀) *Ammospermophilus leucurus*

Today was very bright, 65°F, still, and few high clouds. We noticed for the 1st time much young green vegetation sprouting all over the desert floor (Some dicots and some single grass shoots) Left for home 12:00 Noon.

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1973-4

# Journal

~~26~~ 27 Dec. Tujunga Canyon - along Tujunga Canyon Rd, 3-10 mi NE of Sun~~Valley~~ land, 1.3 to 10 mi. E of intersection w/ Mt Gleason Blvd. L.A. county, Calif.: ~~2500'~~ 2000'.

10:00 - Set traps at various localities along road (Tujunga Canyon Rd.) - the 1st set approx. 1.5 miles from Mt. Gleason Blvd and the last on the Angelas Crest Highway about 2 miles from intersection with Tujunga Canyon Rd. (Eastward). Ten live traps at first 5 stations and 50 live traps at last. Cold nights, cool days; high 60 - low 45. little moon. slight breeze.

~~30~~ 28 Dec. -9:00 AM Checked traps with following results: Set #1 - (across river from road, 1.5 miles E of Mt Gleason Blvd.) no catches. Set #2 - (wide spot past bridge on left of Rd. approx. 3 miles from Mt Gleason Blvd.) 1 Neotoma fuscipes and 1 Perognathus (californicus)?. Set #3 - (small wooded canyon around bend from ranger station 4.7 miles from Mt Gleason Blvd.) no catches. Set # 4 (near tree plantation on hill to right of road past big bridge 1/4 mi.; near road marker "7.93") 3 Dipodomys agilis and 1 Peromyscus truei. Set #5 (right side of road near marker "7.79 in small brushy canyon) 3 Peromyscus sp. Set #6 (in canyon to right of road, approx. 2 mi.

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1973-

# Journal

28 Dec. (Con't) - Tujunga Canyon - various locals along road, L.A county, Calif. 2500'.
from intersection w/ Tujunga Canyon Road (on Angeles Crest Highway)). 3 Neotoma fusipes, 5 Peromyscus sp..
→ NOTE: 21 traps were apparently stolen. they were systematically removed, definitely not misplaced. So, actually only ~~8~~ 79 traps were checked:

Success $17/79 = 21\%$

These animals were given to brother John Hafner for the collection of Texas Tech. University.

29 Dec. (Burbank, Calif.) opposite entrance to De Bell Golf Course, small brushy Canyon. 500' L.A county. Calif.
3:00 P.M. Darcey and I set 83 Live traps and 10 snap traps in various sets up small canyon (200 yds deep.)

30 Dec. Small Canyon opposite entrance to De Bell Golf Course, Burbank, Calif.
7:00 Am. John arrived here last night. We checked traps this morning catching only 1 Reithrodontomys sp. no explanation for poor catch
(Results: $1/93 = 1\%$ success.)

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30 Dec. cont. 3:00 Pm. – Tujunga Canyon, approx. 10 mi. N.E. of Sunland – near tree farm on hill to right of road past big bridge 1/4 mi. (near road marker "7.43", Los Angeles Co. Calif. 2800'.

John Hafner, Kevin & Kenny Ramey and I set 120 live traps and 150 snap traps in same local as Set #4 of 28 Dec 1973. This is the locality I had caught *Dipodomys agilis*. Slight uphill grade, varying from sparse *Adenostoma* (sp.?) community to more lush growth (all bushes) in area immediately N. of young grove of Pines planted perhaps 15 years ago. Ground shows much evidence of recent (5–10 yrs ago) fire. Area in which *Dipodomys* caught somewhat less dense in vegetation than surrounding vegetation.

31 Dec. Tujunga Canyon, near marker "7.43" adjacent to tree Plantation (as above)

7:00 Am. Checked traps:

10 *Dipodomys agilis*
1 *Microtus* (*californicus*)?
18 *Peromyscus* sp.
6 *Neotoma* ~~*fuscipes*~~

Success: – 35/270 = 13%

John reported seeing evidence of (Tree) squirrels in adjacent pine grove. [All specimens given to Texas Tech. University]

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Calif.

Nevada

M S Hafner
1974

# Journal

16 Jan. Big Tujunga canyon, approx. 10 mi NE of Sunland near tree farm on hill to right of road past big bridge 1/4 mi. (near road marker "7.43") L.A. Co. Calif 2200'

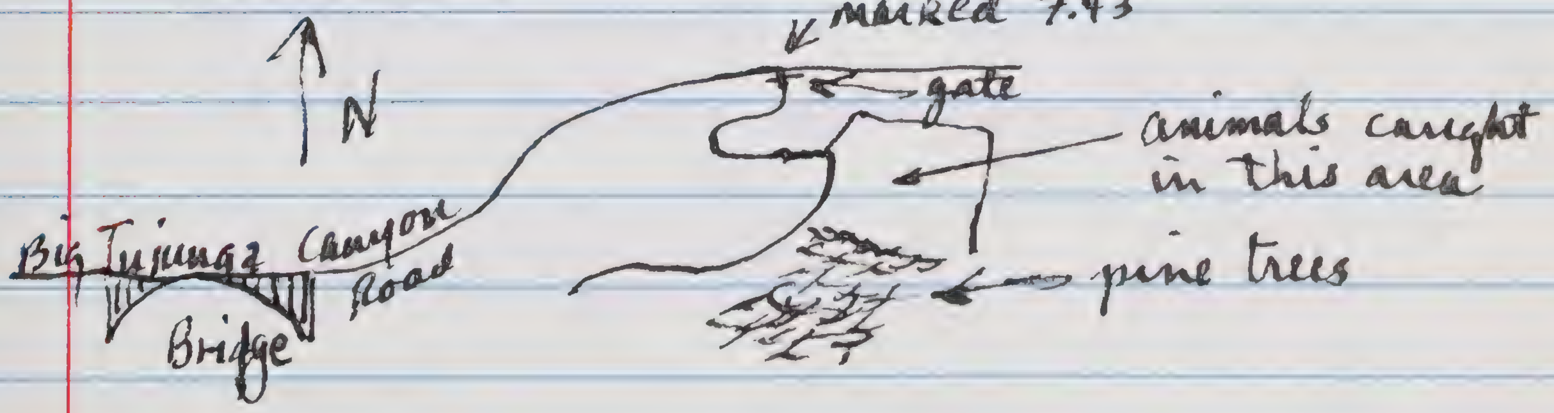
2:00 PM - My dog, "Barron", and I set 82 live traps in this area where John and I had previously caught Dipodomys, Neotoma, Microtus, and Peromyscus. Warm afternoon, cool night (~50°)

17 Jan - Big Tujunga Canyon (as above).

9:00 Am Checked traps set out last night with following results:

3 Dipodomys agilis agilis
1 Reithrodontomys megalotis longicaudus

All animals were caught in center of the relatively sparcely covered area N of the large pines. Holes were not covered generally and were found in small clearings and not necessarily near bush bases.



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# Journal

25 Jan - Big Tujunga Canyon, approx. 10 mi NE of Sunland, L.A. county Calif. Various locals; 1,000-2,500'.
2:00 PM - The dog, "Barron", and I set 73 live traps in the following locals: ① 20 traps on alluvium across river approx. 2 mi. from intersection of Big T. Canyon Rd. and Mt. Gleason Blvd; ② 10 live traps on low, brush hillside to left of rd. (immediately past small bridge) approx. 3 mi. from Mt. Gleason Blvd; and ③ 43 traps in Chapparal adjacent to pine trees near marker "7.43". All areas were low, dense, chapparal.

26 Jan - Big Tujunga Canyon, approx. 10 mi. NE of Sunland LA county. Calif. Various locals; 1,000'-2,500'
10:00 AM. Darcey, Barron, and I checked traps; last night was cold, but still.
Results: Set ① 1 - *Perognathus californicus dispar*
Set ② 1 - *Dipodomys a. agilis* 1 *Peromyscus maniculatus*
Set ③ 1 - *Neotoma fuscipes macrotis*

Success: ~~3~~ 4/73 = ~~4%~~ 5% (MSH)

One cottontail (*Sylvilagus*) was sighted in low brush at set ② - many rabbit droppings covered ground.

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# Journal

16 FEB. - 9.5 mi. ~~North~~ NNE of Johannesburg off Trona Rd. (Campsite #1) 3200' S. Bernardino Co. Calif.

Last night Darcey, "Barron", and I set out 83 live traps and 10 snap traps. (Live Traps on E. side of Trona Rd. and snap traps near camp) Occasional gusty winds throughout the night; 1/4 moon rose about 2 AM; low temp approx 27-30° F.

9:00 AM - checked traps with following results;

18 Perognathus longimembris
3 P. formosus
9 D. merriami (6 were sub ad or juv.)
7 D. panamintinus
3 Peromyscus maniculatus
1 Onychomys torridus -(snap trap) ♀

Success = 41/93 ≅ 50%

All traps with no catches were left in the field to catch Ammospermophilus.

2:00 PM. David and Diane met us at camp and we immediately put up some skins. As we were leaving this camp we checked the remaining traps:

1 Ammospermophilus leucurus ♂

We drove to a point approx. 3-4 miles N of Johannesburg and turned East off

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# Journal

16 Feb con't — *9 mi NE of Johannesburg, in canyon 10 mi. N of Cuttleback lake, S. Bernardino Co. 3200' Calif.

Off of Trona Rd. and traveled approx. 5 miles (with several turns), to a point approx. 9 mi NE of Johannesburg. We set up camp here and set out 75 live and 10 snap traps. The wind blew continually; daytime high temp. approx. 60° F.

[* see 27 September 1974 for better discription of locality]

17 Feb 830 AM — 9 mi. NE of Johannesburg, in canyon 10 mi N of Cuttleback lake, S. Bernardino Co. 3200' Calif.

8:30 AM — David and Diane checked traps with following results:

~~8~~ 17 *Perognathus formosus*
2 *Dipodomys merriami*

Success: 19/85 ≐ 20%

We hiked during the day and found several short mine shafts (10–20') (in one we collected:

2 *Pipistrellus hesperus*

The wind and cool temp. con't throughout the day. We sighted one chukkar and several Loggerhead Shrike, besides many desert sparrows.

4:30 — We drove down the road toward the center of the main canyon and set 75 live and 20 snap traps.

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# Journal

18 Feb - 9 mi. NE of Johannesburg, in canyon 10 mi N of Cuttleback Lake, S. Bernardino Co. 3200' Calif.

(see 27 Sept 1974 for better locality discription)

The wind died down during the night.

8:30 AM - checked traps with following results:

20 - Perognathus formosus

3 - Dipodomys merriami

Success $23/85 \doteq 27\%$

We hiked around until about noon, at which time we headed for home. I brought back 13 D. merriami for my own studies, 1 Ammo. leucurus, 4 D. panamintinus; and 10 P. long. for other students' projects.

The morning after returning home (Tues. morning, 19 Feb.) One Dipodomys panamintinus gave birth; unknown as of yet number of young. (4)

5 April - 9 mi. N. of Johannesburg, off Trona Rd. (Campsite #1) 3200' S. Bernardino Co. Calif.

Darcey and I met Paul Rubin and his girlfriend, Jewel, at camp and we proceeded to set 120 snap and 73 live traps across road to East of Camp. Full moon - slight wind - Checked traps with following

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# Journal

6 Apr - 9.5 mi. N. Johannesburg off Trona Rd. (Camp #1)
San Bernardino Co. Calif. 3200'.
results: 31 Perognathus longimembris
16 P. formosus
2 Peromyscus maniculatus
2 Dipodomys merriami
2 D. panamintinus
1 Ammospermophilus leucurus

1030 - met McNeils and immediately found 2 tortoises. Bill M. found nest of House finch in large Cholla (w/ 4 light blue eggs). During most of day large sheep ~~herd~~ herd passed from West → east around camp.
1600 - Set out traps in same locale as last night.

7 Apr. - 0830 9.5 mi. N. Johannesburg off Trona Rd. (Camp #1)
San Bernardino Co. 3200' Calif.
Checked traps with following results:
1 Onychomys torridus
2 Dipodomys panamintinus
1 D. merriami.
1 Ammospermophilus leucurus
30 P. longimembris
All snap-trapped animals were kept

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# Journal

7 April - <u>9.5 mi. N. Johannesburg, off Trona Rd. (Camp #1)</u>
<u>San Bernardino Co. Calif. 3200'</u>
on ice for David's stomach analysis work. All live *Dipodomys* were brought back for behavioral studies.

Many varieties of annuals were in bloom and the dominant shrubs showed much growth and blooming. High temp approx 75° F low 40° F.

17 Apr. - <u>9.5 mi. N. Johannesburg - 2 mi. E of Trona road (new camp) San Bernardino Co 3200' Calif.</u>

Drove East off of Trona Rd. and past near base of colorful ore deposits in hills to SE of old Campsite #1. In several locations, the ground had been bull-dozed and pool of (stagnant) water were left - The water was apparently there year round and no water life could be seen. We then followed a road north down into the lower valley where we struck out ~~two~~ to the east toward a thin stand of Joshua trees (*Yucca*). We camped ~~at~~ near the largest of ~~these~~ trees and, fighting a

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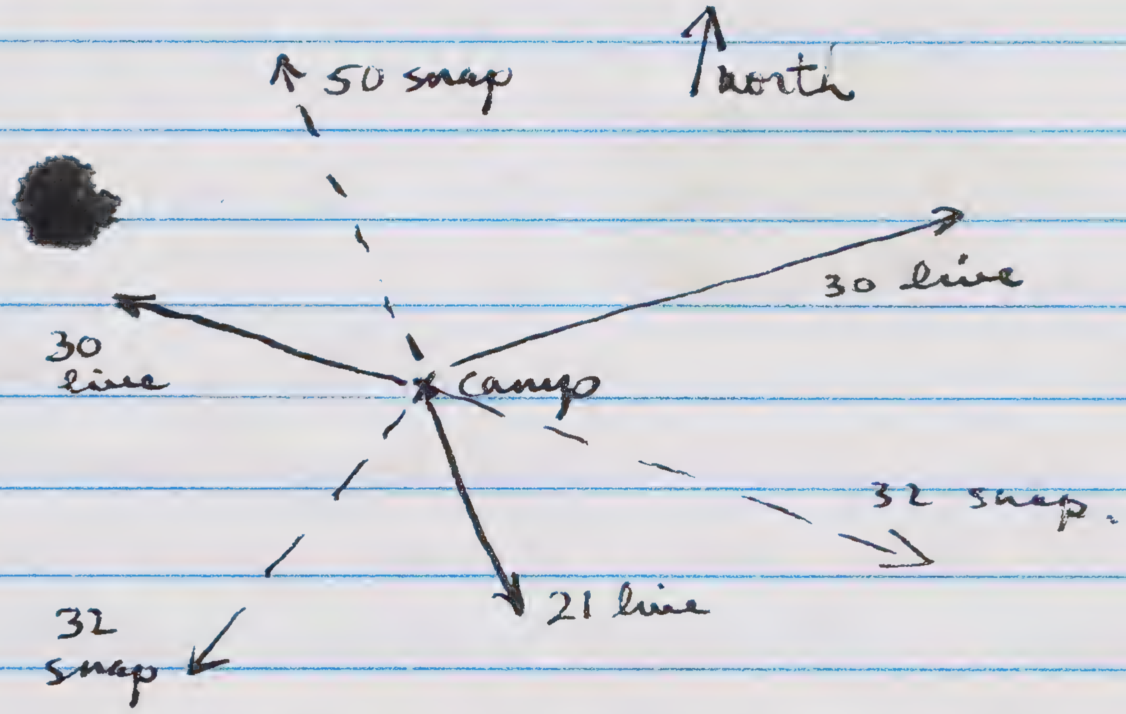
# Journal

17 Apr. 9.5 mi. N. Johannesburg, 2 mi. E of Trona Rd,
(con't) (a new camp) San Bernardino Co. 3200' Calif.
very strong wind, we established camp.
1700- set out ~~124~~ 114 snap and 81 live traps
as per map:




Traps were set approx. 5 meters appart.
1830- Upon returning to camp, I noted a
~~small~~ sidewinder rattle snake (18" long) 2 meters
from camp in a large Larrea directly
beneath Joshua tree - I captured
it in the lizard snare and moved
it 100 meters away to avoid future
encounters. The wind continued all
night, no moon. High 65°F, low 40+°F.
18 Apr. - 9.5 mi. N. Johannesburg, 2 mi E of Trona Rd
(a new camp) San Bernardino Co. 3200' Calif.
0730 Checked traps with following
results -

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# Journal

18 April (con't) — 9.5 mi. N. Johannesburg, 2 mi. E of Trona Rd. (a new camp) San Bernardino Co 3200', Calif.

| | | |
|---|---|---|
| Live traps — | 49 | Perog. long. |
| | 5 | P. formosus |
| | 2 | D. merriami |
| Snap — | 5 | P. long. |
| | 2 | P. long (tail only) |

Success: 32%

1100 — measured vegetation spacing and height, and moved camp into hills (for future analysis) directly south of this camp. (Low hills, widely spaced Larrea, but many other large shrubs very common. Substrate varys from light gravel to dark red on hill sides. Birds sighted: Horned Lark, Loggerhead shrike, White-crowned sparrow, Black-throated Sparrow, Mourning Dove (common), House Finch (common), Costa's Hummer, Common Raven, Common Crow, ♀ Ladderbacked Woodpecker, Ash-throated Flycatcher. ~~On~~ On short walks in P.M. I found a nest of House Finches with 4 light-blue eggs and 1 newly hatched nestling. (in low, thick shrub) I later found the nest of a Costa's Hummer in a fairly thin, low shrub.

Hafner, M.S.
1974

# Journal

18 April – 9.5 mi. N. Johannesburg in "Copper-Colored" hills
(Con't) 1 mi. E of Trona Rd., San Bernardino Co 3200'

The hummingbird's nest contained 2 white eggs. Near this nest (30 meters) was a nest which was approx 6" in diameter, ball shaped, with the entrance at the bottom – no bird was seen near-by.

1600 – Began to set traps. At end of one trap line sighted another nest – bird type to be determined tomorrow. 4 nestlings in nest. Set traps in several directions from camp (over low hills and up sandy ravines)

19 April – 9.5 mi. N. Johannesburg in "copper-colored" hills 1 mi. E of Trona Rd, San Bernardino Co. 3200

moderate wind all night, high (day) 70°F, low 42°F

0730 – Checked traps with following results:

100 snap – (in brushy ravine)
6 *Peromyscus*
60 live → (in brushy, light substrate)
↘ 5 – *Perog. long.*
30 (in red, hilly area)
9 *Perog. formosus*
1 *Peromyscus*

Success: 13%    over

Hafner, M.S.
1974

# Journal

19 April - (con't) 9.5 mi N. Johannesburg in "Copper-colored" hills 1 mi. E. of Trona Rd., San Bernardino Co 3200' Calif.

In the catch last night, there was a definite positive correlation between darkness of substrate and numbers of P. formosus captured.
1300 - I took another short walk noting another Costa's Hummer (♂) and a ♀ White Crowned Sparrow. Several Ammospermophilus leucurus were seen on the hillsides. I photographed the nest that I had discovered while setting traps yesterday and noted a pair of House Finches who were apparently the owners. The alternating A-B-A-B-etc songs of the Desert Sparrow (Amphispiza bilineata) were heard throughout the day. In a small canyon about 200 meters from camp (SE'wardly) I found another nest like the one noted yesterday (6" ball) — I still have not seen any bird life around it. This nest was in the upper parts of a 4' Cholla. I again observed the Costa's Hummer nest noting the following: 1345 - approached within 1.5 meters of nest, ♀ on nest did not fly →

Hafner, M.S.
1974

Journal

19 April (con't) 9.5 mi. N. Johannesburg in "Copper-Colored" hills, 1 mi E. of Trona Rd. San Bernardino Co. 3200'

I moved to a lookout on the bank above the nest approx. 10 meters from the nest... clear view. 1350 - ♀ left nest. 1359 - ♀ returned to a perch near nest (2 meters) a few seconds later she entered the nest, this time facing in my direction - obviously aware of my presence. - ♀ preened breast feathers - turned 90° away from me. 1405 - ♀ leaves nest. 1408 returns to perch, then enters nest, facing me again. 1425 - ♀ leaves nest. ♀ always flew into and out of nest (ie, never perched on nest rim or on any perch in same bush as nest.) 1430 end observations.

1700 - I set 100 snap and 50 live Traps on either side of the road that parallels Trona Rd. approx. 1/4 mi. from the "water holes".

1800 - Darcey, Barron, and I met Paul Rubin at Campsite #1 then proceeded back to the camp in the "Copper-colored hills". The wind was somewhat calmer than previous nights. High and low temperatures were much the same.

Hafner, M.S.
1974

# Journal

20 April - 9.5 mi. N. Johannesburg, in "Copper-colored" hills 1 mi. E. of Trona Rd. San Bernardino Co. 3200'.

08:00 - checked traps with following results:

- 8 *Dipodomys merriami*
- 1 *Ammospermophilus leucurus*
- 23 *Perognathus longimembris*
- 1 *Onychomys torridus* (juv.)
- 1 *Uta* lizard.

Trapping Success: 34/150 = 22%.

This *Onychomys* was my first live captured specimen (and it died the following night from apparent stress.) The strong musky odor associated with this genus was very evident. It is our long held belief that *Onychomys* are escaping from our traps by methodically lifting open the door — this has yet to be tested experimentally. Several of our specimens, although vigorous when captured, have died in the following days - we attribute this to the fact that we are catching nearly all immature animals who are perhaps unable to cope with the stress of being captured —

1400 - Paul and I entered a small cave (mine) very near camp and

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1974

Journal

9.5 mi. N. Johannesburg, in "Copper-Colored" hills
1 mi. E of Trona Rd. San Bernardino Co. 3200' Calif.

20 April (con't)

observed a very interesting Wood-rat (Neotoma lepida) nest. The cave was approx. 1.5 meters high, 1.5 meters wide and 10 meters deep. Very little light was apparent at the deepest point. A carcass of a freshly killed Mourning Dove was laying about 1/4 way in the cave and a dried-up Neotoma carcass was on the cave floor about 3/4 of the way in. When I was about 1/3 of the way in the cave, I noticed a sub-ad. Neotoma clinging to the rocks of the walls about 1 meter from my side - the Woodrat soon quickly ran out the entrance to the cave and disappeared from view into the sunlight outside. At the very end of the cave was a large apparently very old woodrat nest with several entrances and much evidence of use. The 2 adults soon emerged and watched me, showing little fear. The smaller of the two was startled by my movement and climbed the back wall of the cave to a height of

Hafner, M.S.
1974

# Journal

20 April 9.5 mi. N. Johannesburg, in "Copper-Colored" hill 1 mi. E of Trona Rd. San Bernardino Co. 3200' Calif.

20 April (con't) approx. 1.5 meters. The nest itself was about 2 m. wide by about 3 meters long and 2 ft deep. There were 3 main entrances noticable and 2 shallow bird-nest-like indentations were on top of the nest about 2 meters apart — their function is unknown. This cave could be very interesting for future study of Neotoma during daylite conditions.

Later in the P.M. we took a short walk noting a young fledgling house Finch and a jackrabbit (Lepus). One of the nests (House Finch) that I had checked earlier now had 4 young and 1 egg instead of 1 young and 4 eggs as seen yesterday. A sub.ad. Red-tailed Hawk was sighted in the late P.M. and a Zebra-tailed Lizard was kicked up in the sand, apparently too cold to flee.

1700- We set traps near the small rock outcropping by the side of Trona Rd, near the dirt road leading to Camp #1.

Hafner, M.S.
1974

# Journal

21 April - 9.5 mi. N. Johannesburg, in "Copper-colored" hills
1 mi. E of Trona Rd., San Bernardino Co. 3200'

0800 - Checked traps with following results:

15 *Perognathus longimembris*
4 *P. formosus*
8 *Dipodomys panamintinus*
1 *D. merriami*

Success = $\frac{28}{140}$ = 20%

The occurance of so many *D. panamintinus* and so few *D. merriami* is very curious. The substrate appears much lighter in color and the sand and gravel is much finer (nearly powdery). Last night was much calmer than previous nights — could be a clue.

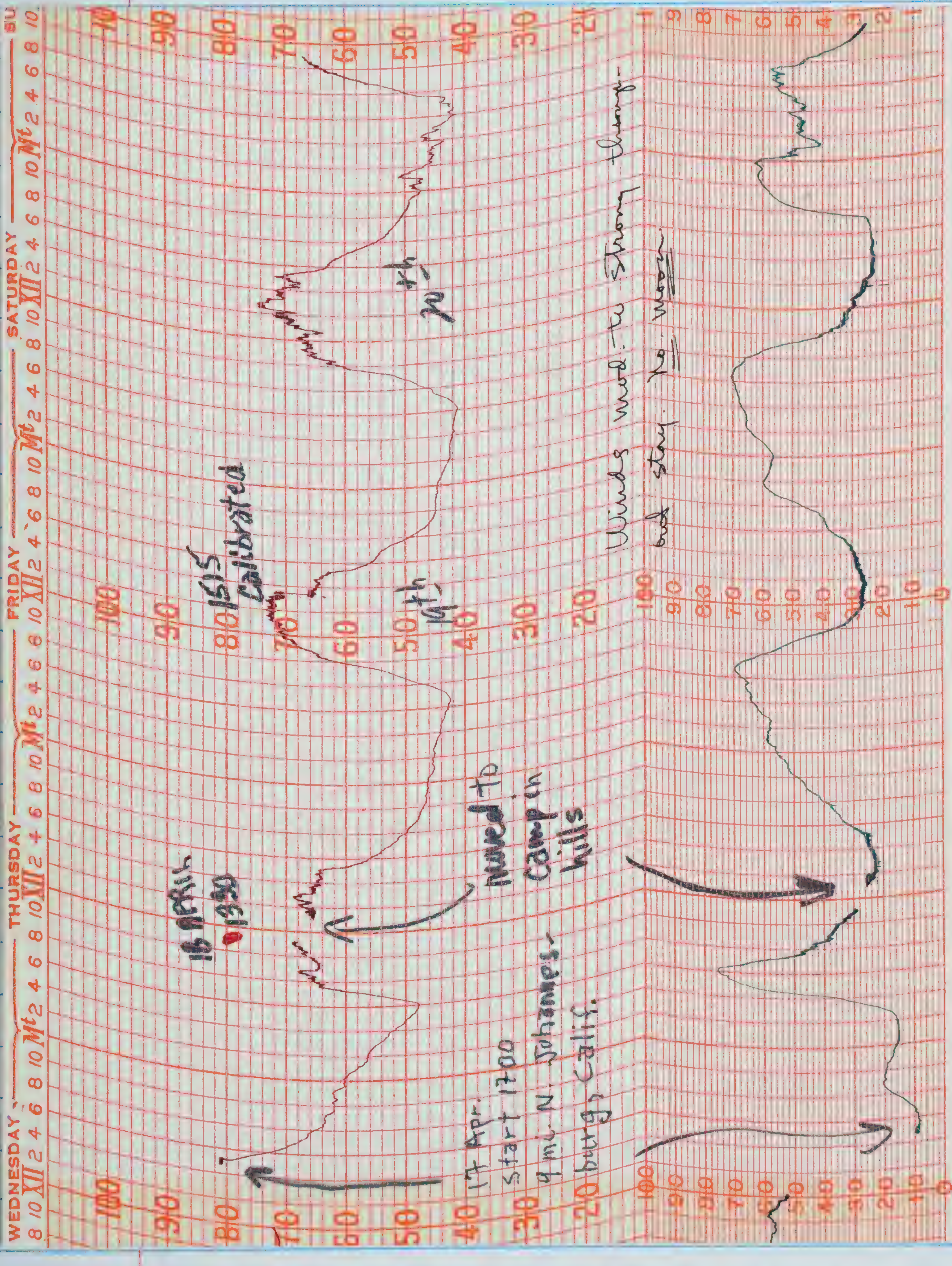
1130 - We left for home — beautiful day - About 2 mi. S. of Palmdale we sighted a Roadrunner (*Geococcyx*) which was running (and flying) to get accross the freeway.

The temp. and rel. humidity records for this trip are in the envelope at the end of the notebook

Hafner, M.S.
1974

# Journal

Partial Weather Data: 17-20 April, 1974



Hafner, M.S.
1974

# Journal

18 May - "Campsite 1", 9.5 mi. N. Johannesburg, off ~~Johannesburg~~ Trona Rd., San Bernardino Co., 3500', Calif.

Arrived here 8:30 PM last night - did not set out traps. Dave and Diane were here since this A.M. No moon, strong wind, not especially cold. In the AM we walked about 1 mile S. of camp into low hills. We sighted a Western Tanager and Lesser Goldfinch. Mourning Doves (desert variety?) were very common as were their nests and eggs. Nests were very poorly constructed cups on ground beneath bushes. Eggs were always 2, pure white. We noted one nest with 2 young approx. ½ feathered. On the hills to the S. of camp, David showed us some pocket gopher (Thomomys) diggings. These diggings were apparently widely separated from any others (perhaps miles?) We captured 3 Horned Lizards on return to camp.

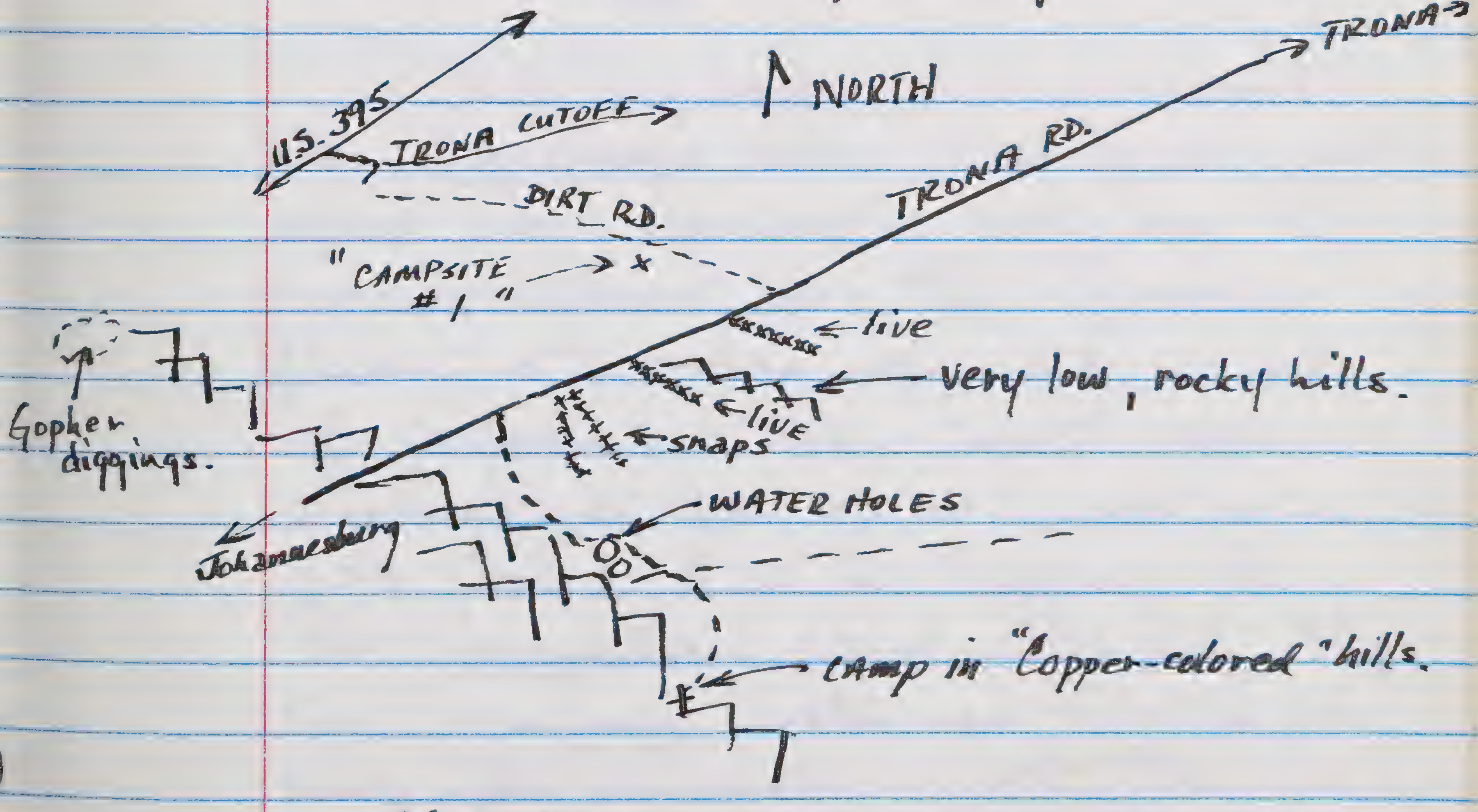
1200 - broke camp and headed for "copper-colored" hills about 3 miles SE of Campsite 1.). At the new camp, (Darcey & I camped here last trip). we took short walks collecting

Hafner, ms.
1974

# Journal

18 May 9.5 mi. N. Johannesburg, in "Copper-colored" hills 1 mi. E. of Trona Rd. San Bernardino Co. 3500' Calif.

(con't) insects for Dianes collection. We re-entered the mineshaft that contained the woodrat nest (Neotoma), but ~~on~~ no activity observed. The wind continued throughout the day, high temp. approx. 70° F. We checked the nests from last trip - all young were gone. (Young Hummingbirds (Costa's were in vicinity of nest).
3:00 Pm. set 150 snap traps and 90 live traps as per map:




Live traps set in sandy areas, w/ thick Hydrophils - ("stickers") -

Hafner, M.S.
1974

# Journal

19 May - 9.5 mi. N. Johannesburg, in "Copper-colored" hills 1 mi. E. of Trona Rd., San Bernardino Co, 3500' Calif.

8:00 AM - checked all traps with following results:

| Live traps | Snap traps |
|---|---|
| 80 Perognathus longimembris | 1 Peromyscus maniculatus |
| 2 P. formosus | 1 Perognathus formosus |
| 7 Dipodomys merriami | 12 P. longimembris |
| 4 D. panamintinus | 1 Onychomys torridus |
| | 2 Dipodomys panamintinus |
| | 1 D. merriami |
| | 1 Thomomys bottae mojavensis |

Success: 112/240 = 47%

The Onychomys was a pregnant ♀. The Dipodomys were usually sub. ad. about even numbers of each sex. Of special interest was the Thomomys (sub. ad ♂) - an apparent case of dispersal - the nearest gopher diggings as far as we know are 1-2 miles S.W. of trapping site. The Perognathus were released, the live Dipodomys returned to lab for study. The remainder of the AM day was spent collecting insects.

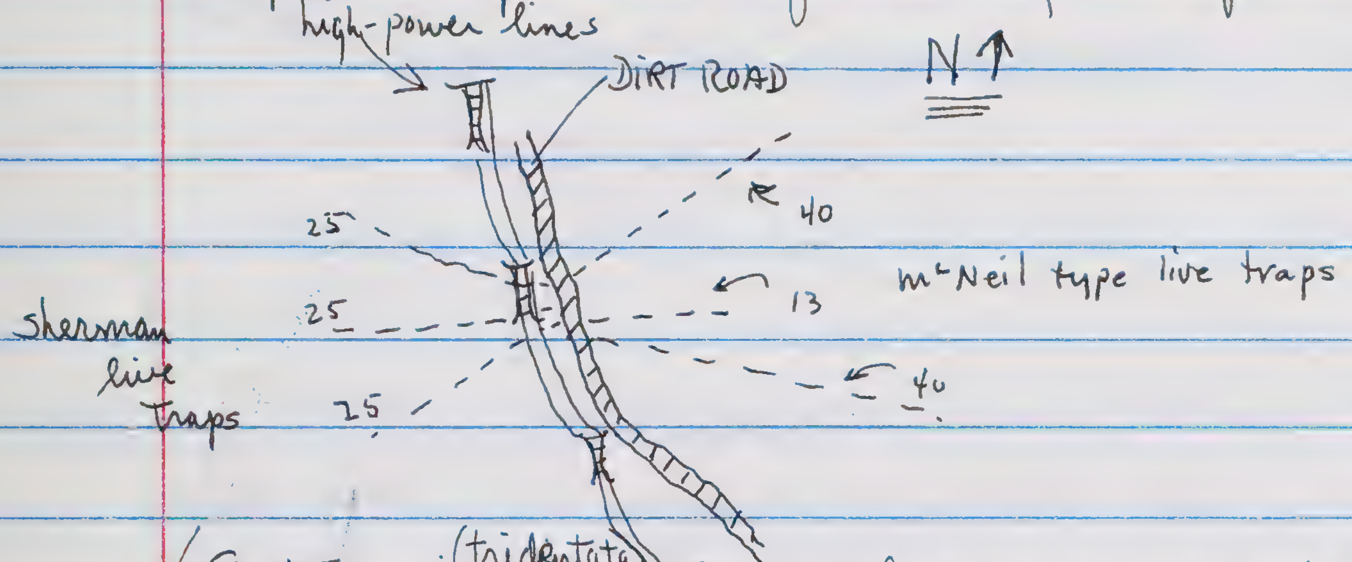
11:30 - departed for home.

Hafner, M.S.
1974

# Journal

12 June - 4 km. NE Larkin Lake, Alkali Valley, 2081 m, Mineral Co., Nevada

John Hafner and I (and "Barron") left Los Angeles at noon today and arrived at Lee Vining at 6: PM. after a very hot trip up U.S. 395. We reached the trapping site by 7:15 PM and immediately set out 168 traps as per the following diagram:




(Artemesia (tridentata) and Chrysothamnus association)

Traps were placed at a distance of approx. 3 meters and baited with Wild-bird seed. During the setting of traps, we were constantly bothered by numerous small Dipterans buzzing around our heads and inflicting many small bites. Several Nighthawks were observed. Very gentle breeze becoming quite cold at night.

13 June - 4 Km. NE - Larkin Lake, Alkali Valley, 2081 m, Mineral Co., Nevada.

Very little sleep during night due to cold. 7:00 Am. checked Traps with results as follows:

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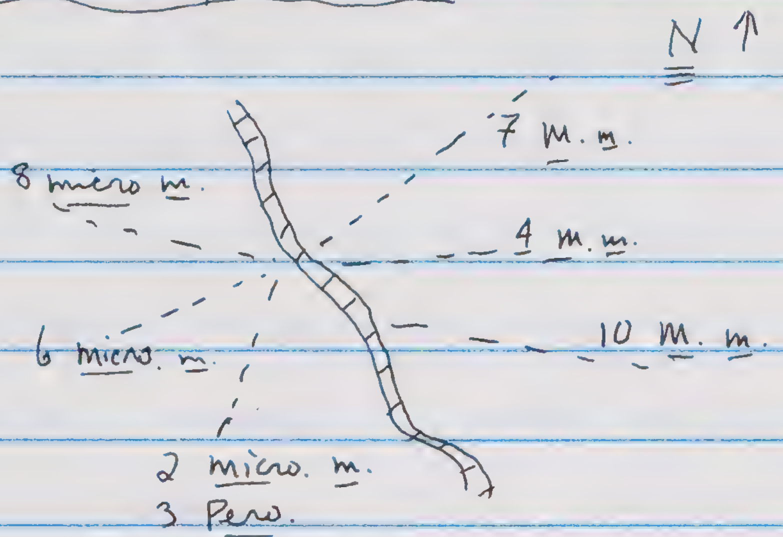
1974

# Journal

13 June - 4 km. NE Larkin Lake, Alkali Valley, 2081 m, Mineral Co., Nevada




Success:
37 microdipodops megacephalus
3 Peromyscus sp.

40/168 = 23.8 %

These Microdipodops were taken home alive and used in conjunction with our Swimming ability studies.

During the remainder of the morning, we measured vegetation density in a 3 m. ~~dia~~ radius circle around 20 successful traps and 20 unsuccessful (no catch) traps. When later analyzed, this data showed no significant difference between vegetation densities around the successful vs. unsuccessful traps.

1000 AM. We broke camp and drove to a camp E. of Yerington. We stopped in a town along the way and each ate ½ of a watermelon) - the weather was extremely warm. (Hawthorn, Nevada)

Hafner, M. S
1974

# Journal

13 June

Mason Valley, 27 km. S, 8 Km. E Yerington, 1525 m., Lyon Co., Nevada.

Approx 2:00 Pm. we arrived in Mason Valley (atriplex association) and we drove over a very rough, sandy road to the Walker River where we had a swim. The river was muddy, cool, and very fast moving (approx. 30 m wide at this point) The area nearby (where we swam) was planted in clover for dairy cattle and the marsh-like land made good habitat for the many ducks and magpies we observed. (John found an arrowhead on the walk from the car to the river!) On our way back to the car John noted a very large (Redtail?) nest high in a tree - we could not identify the tree type nor see any young in the nest from a nearby hill (we did not suspect young to ~~be~~ in the nest in mid-June.) We returned to camp, noting a Collared-lizard on rocks nearby the road.

Our setting out of Traps was interupted by 2 old men ~~on~~ who stopped their trucks near camp and began what ended up to be a lengthy discussion over a couple of

Hafner, M.S.
1974

# Journal

13 June (con't) Mason Valley, 27 km. S., 8 km. E Yerington, 1525 m., Lyon Co., Nevada.

beers. They had lived their entire lives in the Yerington area ~~the~~ most and were full of "facts" as to local wildlife. We asked alot of questions and got a few interesting answers.

We finished setting out traps soon after sunset (9:00 p.m. approx.). We agreed to check traps at 12:30 in the morning and if we had captured at least 10 Microdipodops pallidus we would head home.

14 June Mason Valley, 27 km. S., 8 km. E Yerington, 1525 m., Lyon Co., Nevada.

We arose at 12:30 in the morning (0030). The air was warm and calm. We captured exactly 10 Microdipodops pallidus and approx. 10 Dipodomys microps and approx. 20 Perognathus longimembris all but the M. p. were released. We broke camp at 0130 and headed for Los Angeles. Sunrise occured at approx. 5:00 AM in Bishop, and we were home by 9:00 AM.

That evening Darcey, John, "Barron", and I left L.A. on our drive to Texas.

Hafner, M. S.
1974

# Journal

5 July 3.8 miles N. Mojave, 2787 ft. Kern Co., California.

8:00 PM. Darcey, "Barron", and I arrived at camp where we met David and Diane Hafner. They had set out 71 live traps at a locale approx. 6 mi. NNW of Mojave (about 2 mi. W of "Calif. City Cutoff" from U.S. 58.) We finished setting traps (74) on either side of the dirt road paralleling the high-power lines near camp. The wind blew continually but was warm. *Larrea* association, fine, powdered sand. Full moon rose approx. 10:00 PM.

6 July 3.8 miles N. Mojave, 2787 ft. Kern, Co., California

6:15 checked traps with following results.

1st locality (3.8 mi. N. Mojave):

4 *Neotoma lepida*
1 *Peromyscus* ~~californicus~~ wsH. (*maniculatus*)
11 *Perognathus longimembris*
3 *Onychomys torridus*
15 *Dipodomys merriami* (8♀, 7♂)

2nd locality (6 mi. N.N.W of Mojave) – Z
2 *Perognathus formosus*
4 *Peromyscus maniculatus*
2 *Dipodomys* (*panamintinus*) (1♂, 1♀)

Hafner, M.S.
1974

Journal

6 July (con't) 3.8 miles N. Mojave, 2787 ft. Kern Co. Calif.

Trapping Success: 1st locality (3.8 mi. N. Mojave): 34/74 = 45.9%

2nd locality (6 mi. NNW Mojave): 8/71 = 11.3%

We used the remainder of the day to look at the Tehachapi Pass from Mojave to Tehachapi in connection with our D. herrmanni – D. panamintinus project. We ate lunch at a park in Mojave during the hot afternoon (95° F.) We set traps at two new localities in sandy washes of the Cache Creek:

[Loc "C"] 1st locality – approx. 2.5 mi. E of the Cameron Rd. Turnoff on highway 58, and

[Loc D] 2nd Locality – near Cameron Rd Turnoff from hwy 58.

(71 Traps at 1st Locality, 74 at 2nd locality).

7 July – 3.8 miles N. Mojave, 2787 ft. Kern Co. California.

6:30 arose, and drove up from camp to check traps. The captured animals at 2nd locality were under heavy attack by large ants.

Trapping results were as follows:

-over-

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Journal

7 July (con't) 3.8 miles N. Mojave, 2787 ft. Kern Co., Calif.

1st locality: (see notes)

[Locality "~~B~~C"] 23 *Peromyscus maniculatus*
4 *Perognathus* (*inornatus*)
2 *Perognathus formosus*
3 *Neotoma lepida*
3 *Ammospermophilus leucurus*
1 *Dipodomys* (*panamintinus*)

Success: 36/74 = 48.6 %

2nd locality: (see notes)

[Locality "D"] 4 *Peromyscus maniculatus*
2 *Ammospermophilus leucurus*
1 *Perognathus formosus* (juv.)
3 *Perognathus* (*inornatus*)
5 *Dipodomys* (*panamintinus*)

Success: 15/71 = 21.1 %

The one *D. p.* captured at Locality #1 was found in the sandy bed of Cache creek.

We returned to camp, and at 11:00 AM we left for Los Angeles with all *Dipodomys* and *Onychomys* for further investigations.

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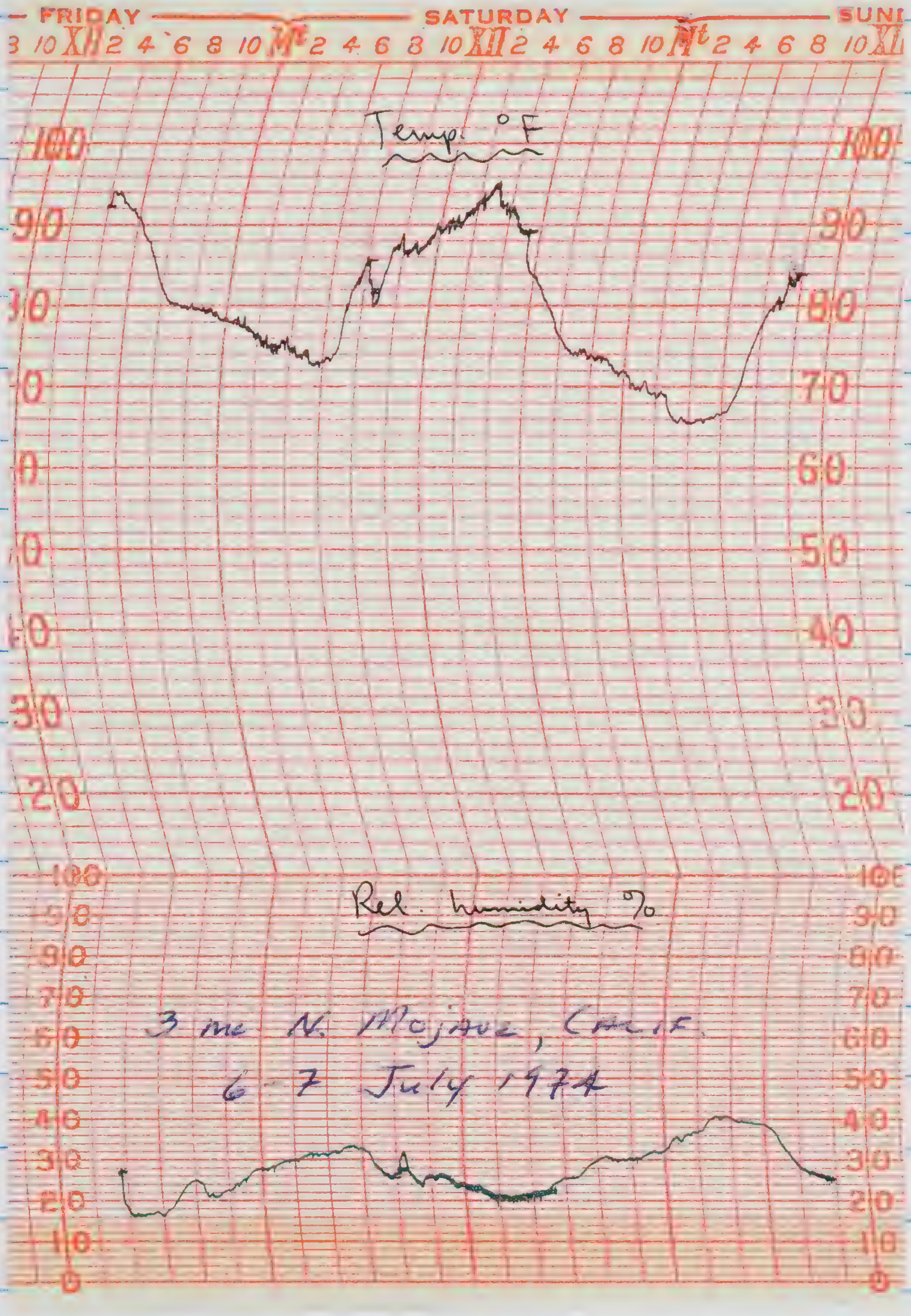
1974

Journal

Partial weather Data for 6-7 July, 1974.



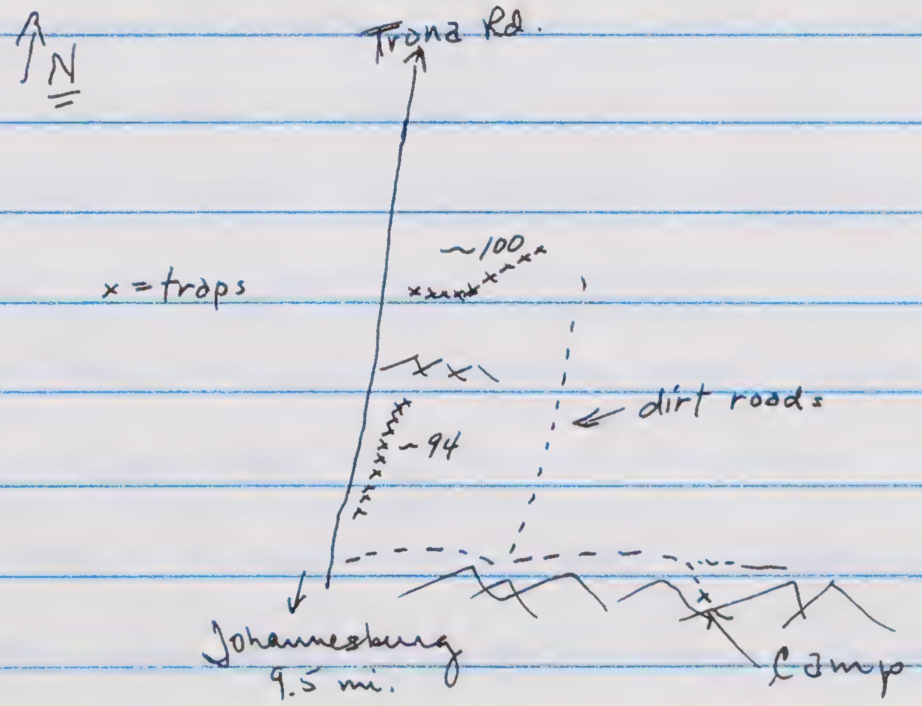
Hafner, M.S
1974

# Journal

12 July — 9.5 mi. N. Johannesburg, 1 mi E of Trona Rd.
San Bernardino Co. 3200' California

2100 - Arrived here where we met David and Diane Hafner. Our purpose is to live-catch "pure" D. panamintinus for chromosome comparison with "pure" D. heermanni from near Bakersfield. We will also take back several D. merriami and compare their activity periods with those of D. p. to see if there is a temporal split between the activity periods of these two sympatric species.

Traps were set on the E side of Trona road as follows:




Upon return to camp we had barbequed "shis-ka-bob" and wine. Very still, warm night. Clear.

Hafner, M.S.
1974

# Journal

13 July — 9.5 mi. N. Johannesburg, 1 mi. E of Trona Rd., San Bernardino Co. 3200' California.

0600 Am. Checked Traps with following results:

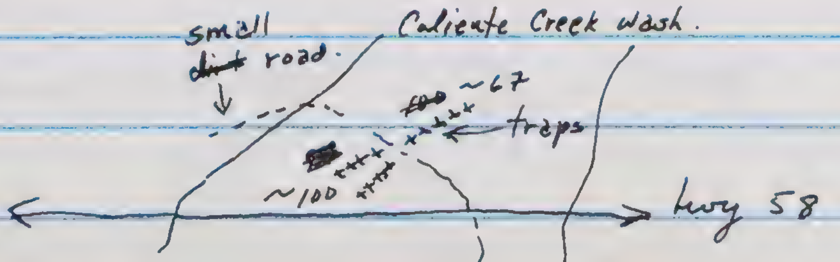
103 *Perognathus longimembris*
6 *Perognathus formosus*
9 *Dipodomys merriami*
9 *Dipodomys panamintinus*
1 *Neotoma lepida*
3 *Ammospermophilus leucurus*
4 *Onychomys torridus*
1 Long-nosed snake (*Rhinocheilus lecontei*)

Trapping Success: $\frac{136}{194} = 70\%$

The *Neotoma's* den was in an old Badger hole which was filled with sticks to the level of the ground.

0800 - We broke camp and headed for Mojave to get some sleep in the cool park (the temp. already this morning was in the high 80's° F.)

1500 - We drove over the Tehachipi pass and camped at sunset in Caliente Creek Wash. Traps were set out in two lines as per the following:




167 Traps

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1974

Journal

13 July (con't) Caliente Creek Wash, 0.3 mi. NE of Hwy 58, 5.5 mi. (by road) ESE of Edison, Kern Co., California 760' (T30S, R30E, SW 1/4 sec 17)

We saw many cottontails (Sylvilagus (audubonii)) in nearby hills along with several Hares (Lepus californicus) and numerous Burrowing owls (Speotyto). The Ground Beetles (Tenebrionidae) were very thick.

At approx. 8:30 (2030) a rancher advised us to go to another canyon to spend the night. We found this canyon very nice, and spent a comfortable night. Saw numerous unidentified small bats foraging after dark.

14 July Caliente Creek Wash, 0.3 mi. NE of Hwy 58, 5.5 mi. (by Road) ESE of Edison, Kern Co. California 760' (T30S, R30E, SW 1/4, sec 17)

0500 We arose and checked traps with the following results:

10 Perognathus (inornatus)
5 Peromyscus maniculatus
~~15~~ 9 D. heermanni
6 D. nitratoides
1 Gophersnake (Pituophis catenifer)

Trapping success: 31/167 ≐ 18 %

Hafner, M.S.
1974

# Journal

14 July (con't) Caliente Creek Wash, 0.3 mi. NE of Hwy 58, 5.5 mi ESE of Edison, Kern Co. California 760' (T30S, R30E, SW¼ sec 17)

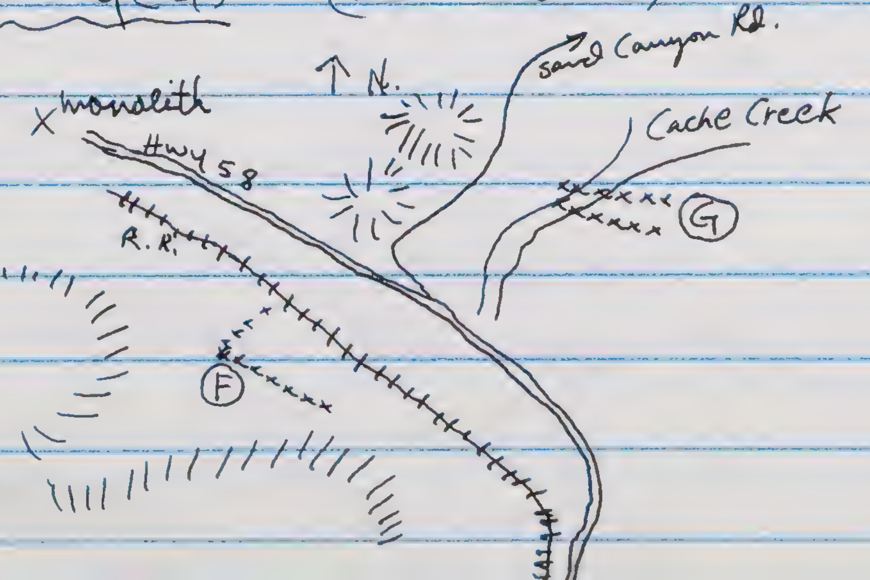
After checking traps we broke camp and drove to Los Angeles via Hwy 5 (Tejon Pass).

17 July Sand Canyon, 0.4 mi N. of Hwy 58, 2.9 mi ~~ESE~~ EXS of Monolith, Kern Co., California 3949' (T32S, R34E, NW¼ sec 27)

1630 - Darcey left work early and we drove to Mojave (3 mi. N) where we released 42 animals with which we had finished experimentation. We reached the trapping locality @ 6:00 PM and began setting traps at 2 localities:

Locality (F): Sand Canyon, 0.1 mi. S of Hwy 58, 3.1 mi. ESE of Monolith, Kern Co., California, 3900'.

Locality (G): (as 17 July above)



Hafner, M.S.
1974

# Journal

17 July (Con't) Sand Canyon, 0.4 mi. N. of Hwy 58, 2.9 mi. EXS of Monolith, Kern Co., California 3949' (T32S, R34E, NW¼ sec 27)

In both trapping localities we concentrated traps in areas of green vegetation (dominant shrub). Many *Dipodomys* burrows were seen. The evening grew cool and the night was cold and a light breeze blew.

18 July Sand Canyon, 0.4 mi. N. of Hwy 58, 2.9 mi. EXS of Monolith, Kern Co., California 3949' (T32S R34E, NW¼ sec 27).

0430 arose early so that we could get Darcey to work on time. Checked traps with following results:

Loc. (F) - (South of Hwy 58):

3 *Reithrodontomys megalotis*
35 *Peromyscus maniculatus*
14 *Dipodomys* (sp.) 5-toed 7 ♂ 7 ♀

Success: 52/93 ≐ 56%

Loc (G) - (North of Hwy 58).

33 *Peromyscus maniculatus*
37 *Dipodomys* (sp.) 5-toed 13 ♀ 24 ♂

Success: 70/97 ≐ 72%

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1974

Journal

18 July (con't) Sand Canyon, 0.4 mi N of Hwy 58, 2.9 mi. E X S of Monolith, Kern Co., California, 3949' T32 S, R34 E, NW1/4 sec 27)

This was an unusually large number of *Dipodomys* — despite the moon being out last night. Many of the *D.* looked like *D. panamintinus* and many looked superficially like *D. heermanni*. However, there were many morphs which appeared *intermediate*. There appeared to be slight behavioral differences between the various morphs, in that, the *D.(h.)* often kicked sand at me as I tried to pull it from the trap, the *D.(p)* morphs did this much less often.

0630 - We left the trapping site and at ~ 7:00 we broke our fan belt and were forced to stop in a small town near Lancaster. We had to go to 5 Gas Stations and waste 2 hours before we could get a new belt and have it installed — the attendants were very uncooperative and offered little help —

Needless to say, Darcey didn't get to work on time, but this was otherwise a successful trip.

Hafner, M. S.
1974

# Journal

16 August 3.8 mi. N. of Mojave, (near power lines) 2787 ft., Kern Co. California

We arrived here approx. 2000 and proceeded to set ~75 traps at this locality and ~115 traps (all live) at locality "D" (see 7 July 1974). We purposely chose settings near the large, dominant shrub, (probably *Chrysothamnus* sp.? later to be identified), as we have noted an apparent association between *Dipodomys* and this shrub. The evening was cool and a gusty wind blew approx. half the night. No moon.

17 August. 3.8 mi. N. of Mojave (near power lines) 2787 ft., Kern Co. California

0545 - Morning was calm and warm. We checked traps at locality "D" with following results:

40 *Peromyscus maniculatus*
14 *Perognathus* (*inornatus*)
9 *Dipodomys panamintinus*
5 ♀, 4 ♂
1 *Neotoma lepida*
1 *Reithrodontomys* (*megalotis*)

Hafner, M.S.
1974

# Journal

17 August (con't)

3.8 mi. N. of Mojave, (near power lines)
2787 ft., Kern Co., California

Trapping Success: 65/115 = ~56%

The traps near camp captured:

20 *D. merriami*

2 *D. panamintinus*, 1♂, 1♀

We had previously believed the above locality to have only 1 *Dipodomys* species (*merriami*), but the 2 *D. panamintinus* captured last night showed that the two species live sympatrically here and animals here (*merriami*) cannot be used in my Circadian rhythm studies as allopatric from other *Dipo.* species. I will now change localities to find a place where *D. merriami* exists in allopatry from *D. panamintinus*. 09:00 We broke camp and moved to "Campsite 1" The day is very warm ~36°C. and, of course very arid < 10° Rel. humidity. Along the road to Randsburg we stopped and hiked in the rocky hills (about ½ mile west of Randsburg).

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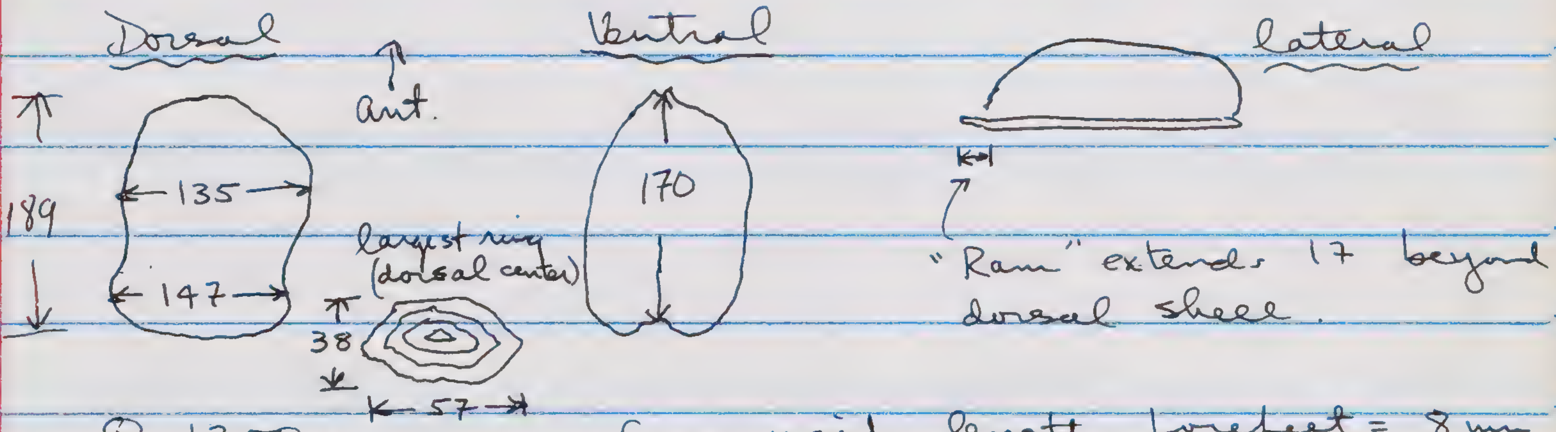
1974

# Journal

17 August (con't) 9.5 mi. by Trona Rd. North of Johannesburg
San Bernardino Co., California, 3200'

We had previously (several years ago) found numerous Chuckwallas (*Sauromalus*) among these rocks, none were evident today (wrong time of day or season?) We did find 1 Desert Tortoise (*Gopherus*) on the steep hill side among the rocks (very unusual locale for a tortoise) The tortoise measured:




♀ 1200g. Avg. nail length forefeet = 8 mm.

After camping, we walked up the slight hills to the S. & E of camp and again observed the *Thomomys* diggings in the friable soils of 2 or 3 small hill sides.

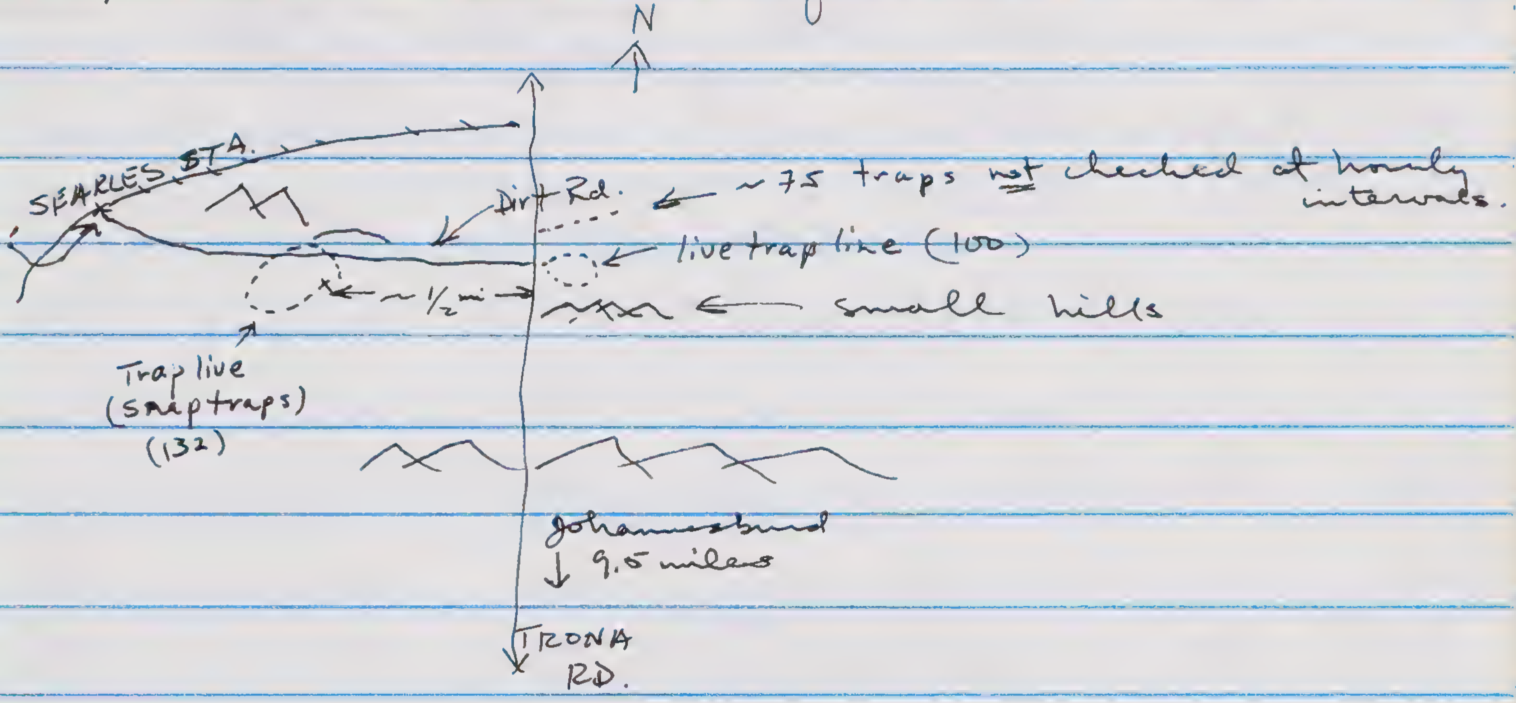
1700 We set up a weather station to record weather data throughout the night & 100 live traps and 132 snap traps will be checked throughout

Hafner, M.S.
1974

# Journal

17 August (con't) 9.5 mi. N. (by Road) of Johannesburg by Trona Road San Bernardino Co., Calif. 3200'

the night at hourly intervals. The traps were set as follows:




18 August 9.5 mi. N. of Johannesburg, by Trona Rd, San Bernardino Co., California 3200'

The traps were checked throughout the night with the Results shown in the table on the following page. Weather Data as below.
0800 We made the final check of all traps; ~75 traps were not checked throughout night. These captured:

36 ~~44~~ Perognathus longimembris
4 Ammospermophilus leucurus
1 Peromyscus maniculatus

Hafner, M.S.
1974

# Journal

## (Weather Data Night of 17-18 ~~16-17~~ August 1974)
(See notes for locality)

| | Temp. 20 mm. above surface | Temp. 300 mm ~~150 mm~~ (#2) below surface | Temp. 615 mm ~~600 mm.~~ (#1) below surface | Wind-Speed ~~ft/sec.~~ MPH | Wind direction from | Relative Humidity % | Avail. Light ft. cand. |
|---|---|---|---|---|---|---|---|
| August 2000 | 28.5 | 30.8 ~~28.5~~ | 28.5 | 6-7 Gusts to 16 | South ~~S~~ | 14 % | 0.45 |
| 2100 | 25.5 | 30.8 | 28.5 | ~8 Gusts → 16 | South | 18 | .00 |
| 2200 | 24.5 | 30.8 | 28.2 | 7-8 GUSTS → 13 | South | 20. | .00 |
| 2300 | 22.7 | 30.9 | 28.2 | ~~5~~ ~5 GUSTS → 8 | South | 21. | .00 |
| 2400 | 21.0 | 30.9 | 28.1 | 7-8 Gusts → 14 | South | 24 | .00 |
| 18 August 0100 | 20.7 | 30.9 | 28.1 | 7-8 GUSTS → 13 | South | 22 | .00 |
| 0200 | 20.0 | 30.9 | 28.1 | 8-10 Gust → 18 | South | 26 | .00 |
| 0300 | 19.2 | 30.5 | 28.1 | 9-10 GUST → 17 | South | 26 | .00 |
| 0400 | 19.0 | 30.4 | 28.0 | 7-10 Gusts → 18 | South | 28 | .00 |
| 0500 | 17.4 | 30.1 | 28.0 | ~2 GUSTS → 6 | South | 29 | .00 |
| 0600 | 17.0 | 30.1 | 28.0 | ~~5~~ 6-7 Gusts → 10 | South | 30 | .25 |
| 0700 | 19.2 | 30.2 | 28.2 | 4 Gusts → 9 | South | 32 | >100.0 |
| 0800 | 23.5 | 30.2 | 28.2 | 7 Gusts → 18 | South | 28 | >100.0 |

Remarks:

0600 ants on only one trap (ants through 0400)

No moon

Clear sky until early A.M.

Sun Rise approx. 0600

Hafner, M.S
1974

Journal

18 August (con't) 9.5 mi. N. of Johannesburg, by Trona Rd., San Bernardino, Co. California, 3200'

1 *Onychomys torridus*
4 *Dipodomys panamintinus* (all ♀♀)

Trapping Success: 46/~75 = ~61%

All live captured D. panamintinus were returned to the lab. for activity pattern study. The snap trapped animals were collected for stomach contents analysis, sex and age ratio studies. All animals captured in the hourly checks were released so as not to bias the following hour's results.

1000 - We broke camp and returned to L.A.

(Table of trapping results follows)

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## Trapping Results for night of 17-18 August, 1974: *

| | Ammospermophilus leucurus | Dipodomys merriami | Dipodomys panamintinus | Neotoma lepida | Onychomys torridus | Perognathus formosus | Perognathus longimembris | Peromyscus maniculatus | Peromyscus sp.? crinitus? eremicus? |
|---|---|---|---|---|---|---|---|---|---|
| 1932 ** 2000 | | | | | | | | | |
| sunset → 2100 | - | 43.0 g 1 ♀ | 61.0 g 65.0 g 2 ♀♀ | - | 4 | 2 | 17 | 1 | - |
| 2200 | - | 43 g 47 g 2 ♀♀ | 68 g 1 ♂ | - | 4 | 2 | 25 | - | - |
| 2300 | - | - | 65 g 67 g 75 g 68 g 3 ♀♀, 1 ♂ | - | 4 | 1 | 19 | 1 | - |
| 2400 | - | - | 73 g 76 g 64 g 1 ♀, 2 ♂♂ | - | 5 | - | 24 | - | - |
| 0100 | - | 34 g 1 ♀ imm. | 71 g 74 g 2 ♀♀ | - | 2 | 1 | 23 | 2 | - |
| 0200 | - | - | 69 g 1 ♀ | - | 2 | 3 | 15 | 3 | - |
| 0300 | - | (escaped) 1? imm. | 70 g 1 ♂ | - | 1 | - | 9 | 2 | - |
| 0400 | - | - | 75 g 1 ♀ | - | - | 1 | 9 | 3 | - |
| 0500 | - | - | (1 escaped) 66 g, 61 g ↓ 1 ♀, 1 ♂, 1? | - | - | - | 8 | 2 | - |
| 0600 | - | - | 75.0 g 1 ♀ | - | - | - | 6 | 1 | - |
| ~ sunrise → 0700 | - | - | - | - | - | - | 3 | - | - |
| 0800 | | | | | | | | | |

* It was decided not to include snap trap results as a measure of activity because each capture removes one animal from the population. (Following page has snap-trap results)

** Approx. ½ hour before sunset

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1974

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## Snap Trap results for night of 17-18 August 1974:

*see previous page for abbreviations

| | A.l. | D.m. | D.p. | N.l. | O.x. | P.f. | P.l. | P.m. | P. sp.? |
|---|---|---|---|---|---|---|---|---|---|
| 2000 | – | – | – | – | – | – | – | – | – |
| 2100 | – | – | 2 | – | – | – | 3 | – | – |
| 2200 | – | – | 3 | – | – | – | – | – | – |
| 2300 | – | 1 | 1 | – | – | – | ~~[illegible]~~ 0 | ~~[illegible]~~ 1 | – |
| 2400 | – | 1 | 1 | – | – | – | 1 | 2 | – |
| 0100 | – | 3 | – | – | – | – | 1 | – | – |
| 0200 | – | – | 1 | – | – | – | 1 | – | – |
| 0300 | – | – | 2 | – | – | – | 2 | – | – |
| 0400 | – | 1 | – | – | – | – | 1 | 1 | 1 |
| 0500 | – | – | – | – | – | – | – | – | – |
| 0600 | – | (1 D.p. tail) | | – | – | – | 1 | – | – |
| 0700 | – | – | – | – | – | – | – | – | – |
| 0800 | – | – | – | – | – | – | – | – | – |

Hafner, M.S.
1974

# Journal

(see 27 September 1974 for actual locality)

30 August 9 mi. NE of Johannesburg, in valley 10 mi. N. of Cuttaback Lake, San Bernardino Co. 3200', California (camp 2)

We arrived here ~ 2130. Full moon, calm, very warm evening. We set out 190 live traps on the valley floor. There was much evidence of washing due to flash floods (in the spring). Our attempt is to capture *D. merriami* which live in allopatry from *D. panamintinus* — previous trapping in this locality indicate this is the case.

(see 27 September 1974 for actual locality)

31 August 9 mi. NE. of Johannesburg, in valley 10 mi. N. of Cuttaback lake, San Bernardino Co., 3200', California.

0600 — awoke and checked traps with following results:

47 *Perognathus formosus*
13 *D. merriami* 7 ♀, 6 ♂
2 *Peromyscus maniculatus*
3 *Peromyscus* (sp.?)
4 *Perognathus longimembris*

Hafner, M-S.
1974

# Journal

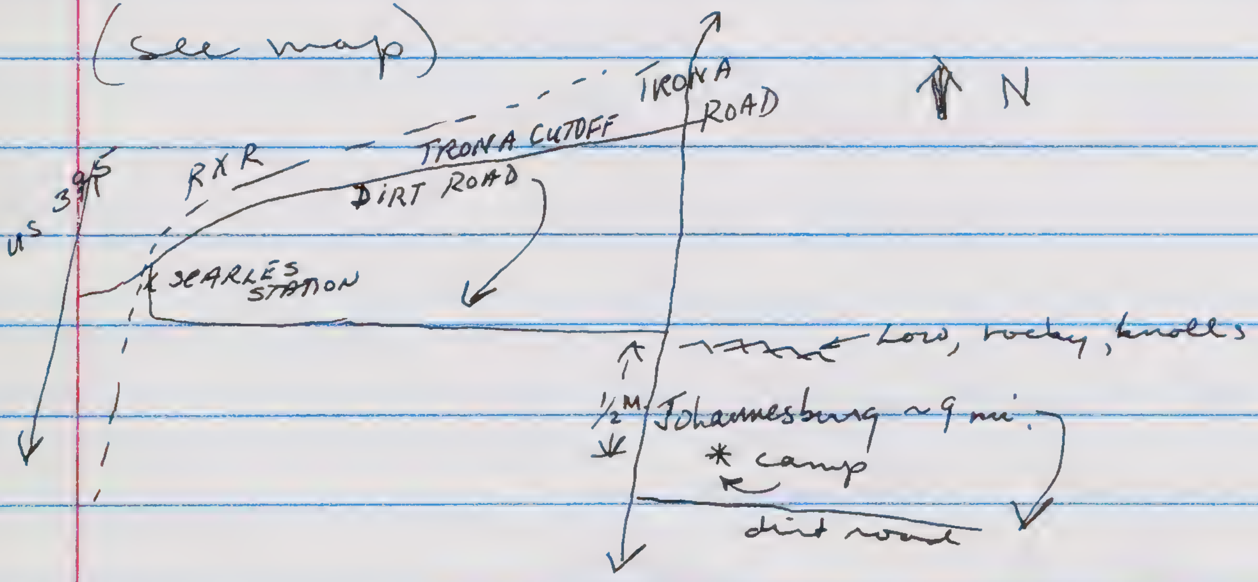
31 August (con't)

(see 27 September 1974 for actual locality)

9 mi. N.E. Johannesburg, in valley 10 mi. N. of Cuddeback lake, San Bernardino Co., 3200', California

Trapping success: $69/190$ = 36%

0900 We drove into Johannesburg to replenish ice supply, and then drove to "Camp 1" (see below of exact locality). We camped about 200 meters from the main road, approx. 1/2 mile south of the rocky knoll which lies to the SE of the road: (see map)




The day was very warm (and we napped for awhile to stay out of the heat) We camped beneath a large Joshua, (Yucca brevifolia), which contained what appeared to be a woodpecker's nest. (This should be looked into in the spring.)

Hafner, ms.
1974

# Journal

31 August (Con't)

9.5 mi. N. Johannesburg, 200 m. E of Trona Rd, San Bernardino Co., 3200', Calif.

1600 - We walked through the low hills SW of camp to the locality where we had previously observed Gopher ~~g~~ diggings (shown to us by David Hafner) We set 4 live traps of the "McNeil" type down gopher holes which showed recent digging. We later returned to camp and set out 1) 100 live traps to be checked hourly through the night.

2) The remaining 74 live traps to be checks once in the morning and

3) 90 Snap-traps to collect a monthly Sample for David J Hafner and Diane Hafner.

I checked the traps throughout the night. There was a full moon the entire night and the wind was approximately 1 MPH with gusts to 3-4 MPH the entire night. The results of the trapping are on the

Hafner, M.S. 1974

Journal

9.5 mi. N. of Johannesburg, 200 m. E. of Trona Rd., San Bernardino Co., 3200', California -

31 August (cont.)

following table. Numerous Coyote howls were heard throughout the night, being especially apparent around 0300.

1 Sept. Results other than 100 traps that were checked hourly:

Live traps: 30 *Perognathus longimembris*
4 *Dipodomys merriami*
2 *Dipodomys panamintinus*

success = 36/74 ≅ 50%

Snap traps: 6 *P. longimembris*
4 *D. merriami*
3 *D. panamintinus*
2 *Peromyscus maniculatus*

success = 15/90 ≐ 17%

After breaking camp (~0800) we drove over to the locality where we had set the gopher traps — there were no captures, however

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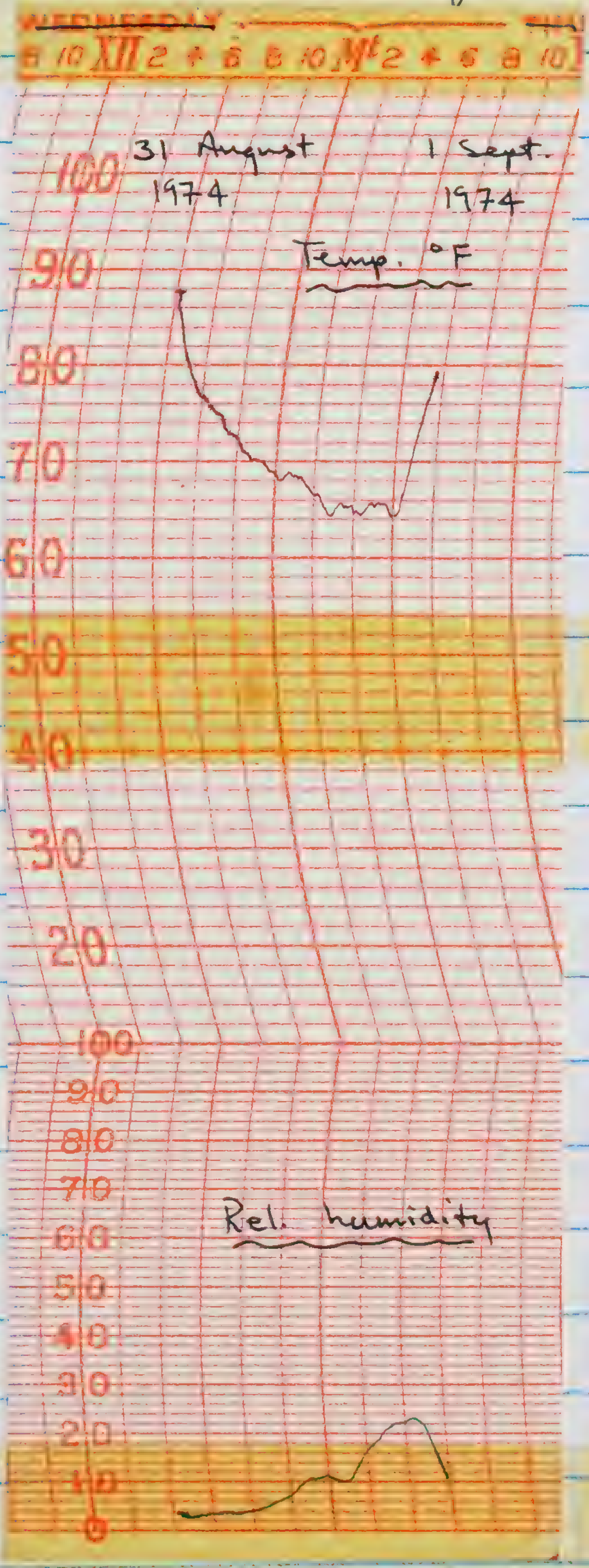
1974

# Journal

9.5 mi. N. of Johannesburg, 200 m. E. of Trona Rd., San Bernardino Co., 3200', California

1 Sept. (con't) there was definite evidence that the gophers are alive and active. (ie. traps were buried).

0900 - we headed for Los Angeles.



Hafner, M.S.
1974

# Journal

31 August –
1 Sept.

Trapping Results for night of 31 August – 1 September 1974:

(no *Onychomys* captured) → O.E.

| Conditions | Time | *Ammospermophilus leucurus* | *Dipodomys merriami* | *Dipodomys panamintinus* | *Perognathus longimembris* | *Perognathus formosus* | *Peromyscus maniculatus* | *Peromyscus* sp.? | *Neotoma lepida* |
|---|---|---|---|---|---|---|---|---|---|
| [...t. candles ...d 8 ... to 17 mph] * | 1900 | – | – | – | – | – | – | – | – |
| [... ft. candles ...2 w/gusts ... MPH] | 2000 | – | – | – | 1 | – | – | – | – |
| [...l moon, no ...s] | 2100 | – | 1♀, 1? (1 escaped) | 1♀ | 12 | – | 2 | – | – |
| [...ost calm] | 2200 | – | 1? (escaped) | – | 15 | – | 1 | – | – |
| [calm] | 2300 | – | 1♀ | 1♀, 1? (escaped) | 13 | – | – | – | – |
| | 2400 | – | 3♀♀ | – | 10 | – | 2 | – | – |
| | 0100 | – | 3♀♀, 1? (1 escaped) | 1♀ | 9 | – | 2 | – | – |
| | 0200 | – | – | 1♀, 1♂ | 12 | – | 1 | – | – |
| | 0300 | – | 1♀, 1? (1 escaped) | – | 4 | – | 1 | – | – |
| | 0400 | – | 1♀, 1? (1 escaped) | 1♀, 1♂ | 6 | – | – | – | – |
| [...ost moonset ... very dark] | 0500 | – | – | – | 3 | – | – | – | – |
| [...min. before ...ise, very light] | 0600 | – | 1♀ | ♂ | 6 | 1 | – | – | – |
| [sun up] | 0700 | – | – | – | 2 | – | – | – | – |

* approx. ½ hour before sunset. Note that the trapping results for 17–18 August 1974 began @ 2000 hours — I feel that since both times are approx. ½ hour before sunset, then they are comparable.

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1974

# Journal

15 September 16 mi. W. Hawthorne, 5600', Lyon Co., Nevada.

1130 - John and I left L.A. - arrived Lee Vining ~1800. We drove over California Hwy 167 and took the turnoff to Larkin (dry) Lake. We had planned to trap near Alkali dry lake, but the road was impassable so we drove over dirt road northerly toward Aurora, Nevada. Sunset was ~2000. Soon after sunset John noticed a Microdipodops (megacephalus) run across the road and easily climb a ~1½ meter rock bank near the road. Although this genus is found almost exclusively on sandy, flat desert floors, they appear to be quite nimble on rocks. We drove past Fletcher, Nevada and took the road NNE roughly toward Yerington. We camped at the above locality @ about 2100 at which time we set out 227 live traps around camp. The vegetation consisted almost entirely of some species of Atriplex (we think). There were very few Chrysothamnus (sp.) - Often associated with Microdipodops megacephalus.

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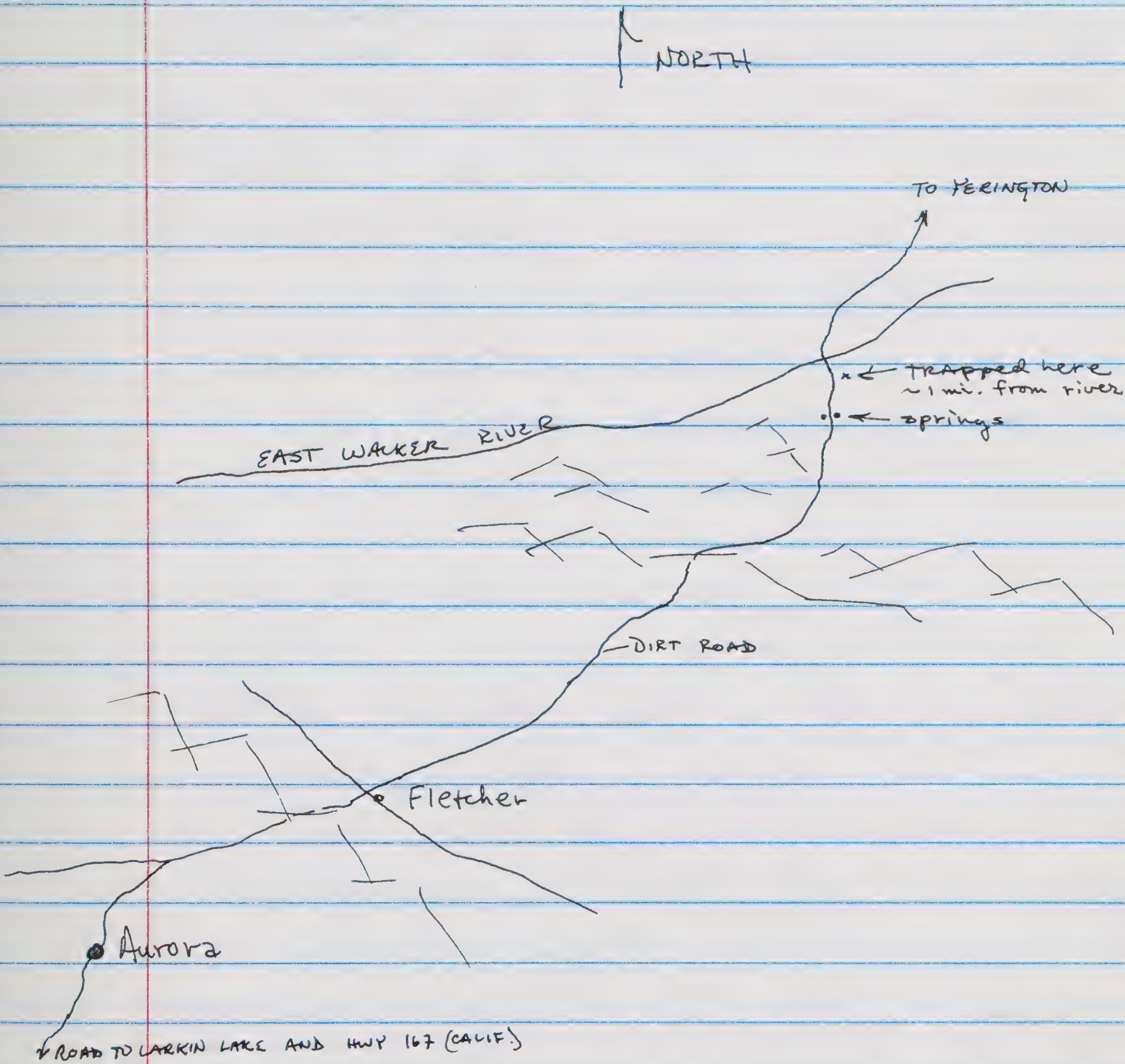
15-16 September

Map for locality of 15-16 September



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1974

Journal

16 September — 16 mi. W. Hawthorne, 5600 ft., Lyon Co., Nevada

~0300 (Coyote calls were heard during the night)

0700 - We checked the traps with the following results:

7 *Dipodomys merriami* hf = 39.5 (large?)
2 *Dipodomys microps* hf = 43 hf = 45
1 *Neotoma lepida*
1 *Onychomys leucogaster* (Sub. ad.)
1 *Perognathus formosus*

Trapping Success = 12/227 ≐ 5%

This locality had no *Microdipodops* and the mountains to the SW may very well mark the northernmost extension of *M. megacephalus*' range (They were caught near Fletcher, Nevada).

We walked around for a few hours and noted little animal life and even less evidence of diggings. John found an arrowhead near a spring about 1 mile West of camp.

1130 - We drove north across Walker river noting many Sparrow hawks (*Falco sparverius*) and Magpies on trees and poles along the way. We attempted to

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1974

# Journal

16 September (con't) 16 mi. W. Hawthorne, 5600', Lyons Co., Nevada

cross the East Walker River at a point near the "Flying-M Ranch, but we were rudely kicked off the property by the woman owner of the Ranch. We drove further north along the dirt rode on the West side of the river, (the road leads to Yerington, Nevada.), and turned E'ly on "Rafter 7" Road which lead across the River. We checked-out localities and then re-crossed the river, immediately turning North on a dirt road paralleling the bank of the river. We noted several very large nests in large trees along the river, one nest having a Red-tailed Hawk perched nearby. We walked to the locality where John had lost his suitcase during our trip in June, but we could not find it.

~1500 - We ate lunch and waded in the river which was too cold to really swim in. We noted evidence of where a (Racoon ?) had eaten a crayfish on a small sandbar near the riverbank.

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1974

# Journal

16 September (con't)

16 mi. W. Hawthorne, 5600 ft., Lyon Co., Nevada

A short time later I saw a rather large (≈200 mm) Crayfish with conspicuous yellow ~~o~~ banding on its claws. We saw evidence of recent Beaver (*Castor*) work on logs nearby the river and later exploration found many more knawed logs and fairly recent Beaver runways in the grass. A sample of the knawed wood and leaves from the dominant tree were returned for further information.

1600 - we set 140 live traps on the east side of Walker river at a point 13.5 mi. North and 18 mi. west of Hawthorne, Nevada. Although the habitat looked somewhat unfavorable for *Microdipodops*, we choose a wash that looked reasonable good (i.e. Sandy soil). We then drove back across to the west side of the river and returned ~~the~~ to a point 4.5 mi. N. and 20.5 mi. W. of Hawthorne, Nevada where we set 160 live traps. This latter area looked much better for finding *Microdipodops* although it was separated from other favorable habitat to the N. by rocky soil and separated

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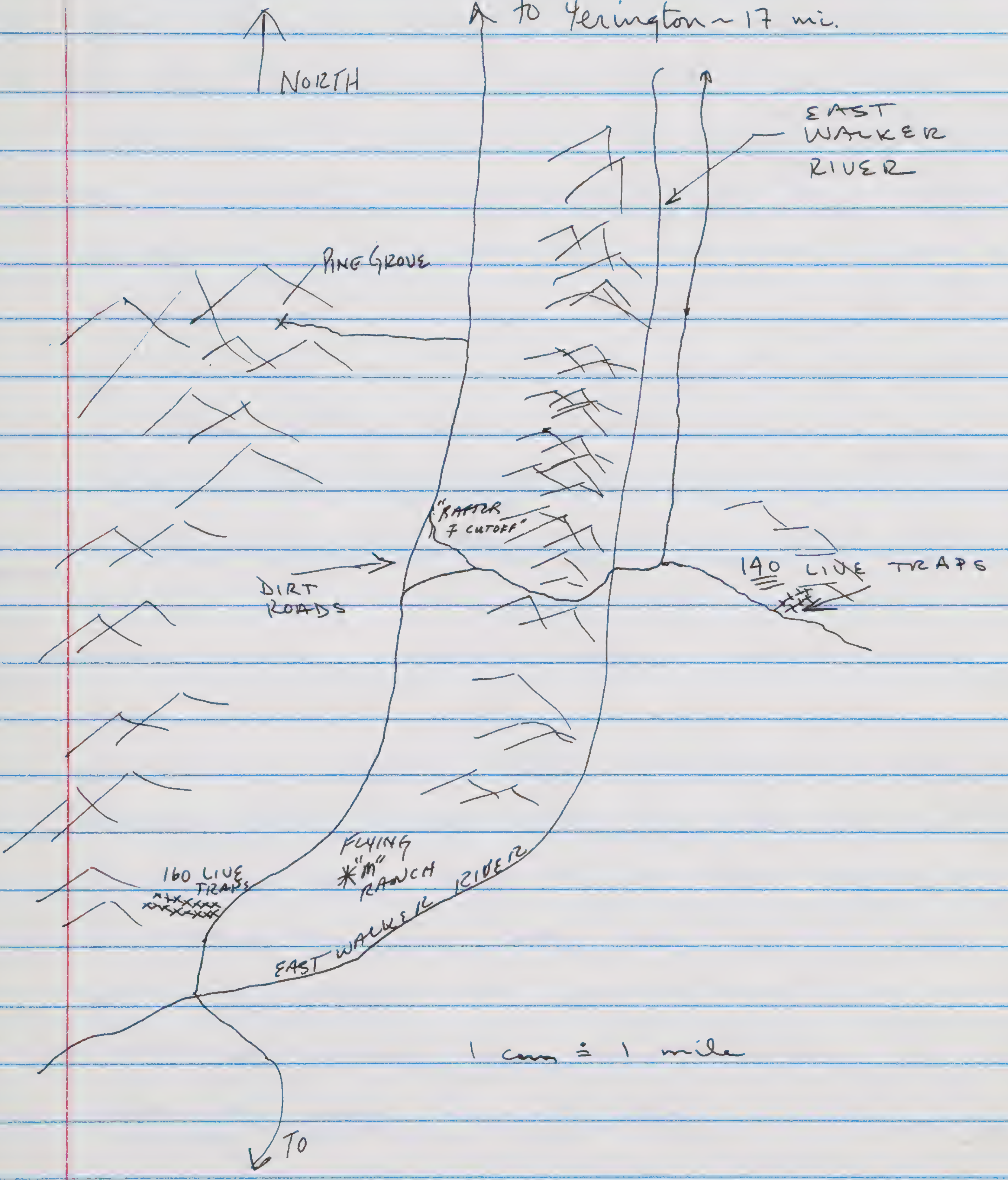
16-17 September

Maps for trapping locality of 16-17 September




1 cm ≐ 1 mile

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# Journal

16 September (cont) - Vicinity ~20 mi. S. Yerington, Lyon Co. Nevada

from known Microdipodops populations to the South by rocky (low) mountains and the East Walker River. [neither locality had dense vegetation—only Atriplex, Artemisia, Chryso.]

1800 - We drove into Yerington, where I called Dancey about 1830. We bought some bread & beer and camped outside of Yerington in the hills just northwest of town. On the road toward Yerington we noted an Od. Coyote cross the road and an imm. Great Horned Owl.

17 September Vicinity of Yerington, Lyon Co, Nevada

0700 We arose, broke camp and drove into Yerington where we bought provisions, gas, and headed South along the East side of the river to check our trap lines. We checked the traps on the East side of the River first. Results:

13.5 mi. N. and 18 mi. W. Hawthorne, 5000 ft., Lyon Co, Nevada

4. Dipodomys microps

1. D. merriami

3 Ch. leucurus

success = 8/140 ≐ 6%

There was evidence that a large

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17 September (con't) — Vicinity of Yerington, Lyon Co. Nevada

animal had disturbed some of our traps. (The musky scent indicated a Mustelid, probably a Badger (*Taxidea*)) We drove back across the river to the second set. Results:

4.5 mi. N, 20.5 mi. W Hawthorne, 5000 ft. Lyon Co. Nevada.

3 *Dipodomys microps*
8 *D. merriami*
5 *Perognathus longimembris*
2 *Dipodomys panamintinus*
1 *Peromyscus maniculatus*

Success = 19/160 ≐ 12%

The fact that we chose the habitats most favorable to *Microdipodops* in both the localities indicates strongly that this genus is not found in the vicinity of either trapping site due to (perhaps) poor habitat separating the trapping sites from the know *micro.* habitats to the N and NW. We drove

Hafner, M.S. 1974 Journal

17 September (con't) – Vicinity S. of Yerington, Lyon Co, Nevada.

N. (toward Yerington) and took the cutoff Wy toward Pine Grove. We arrived in Pine Grove ~1200 and we ate lunch beneath shady pinetrees and just relaxed in the coolness. We later explored one of the many mines in this area – (a historical marker said that one mine here made $5 million between 1860-8 and another made $3 million – mostly gold, some silver). The shaft we went into contained no bats, but was amazing anyway; the opening was a very precise archway about 1.5 meters high (below head height), the floor was very level and there were only a few minor cave-in's on the sides of the shaft. We followed it in approx. 140-150 meters where it branched, cave-in's further on made us decide to turn back. 1500 – We walked around the area where the miners had apparently camped – we found many parts of old bottles and other keep-sakes. 1600 – We set 305 live traps (see MAP) in a very sandy, sparsely brushed area south of Yerington. There was much evidence of rodent activity, and I noted an old Badger burrow.

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1974

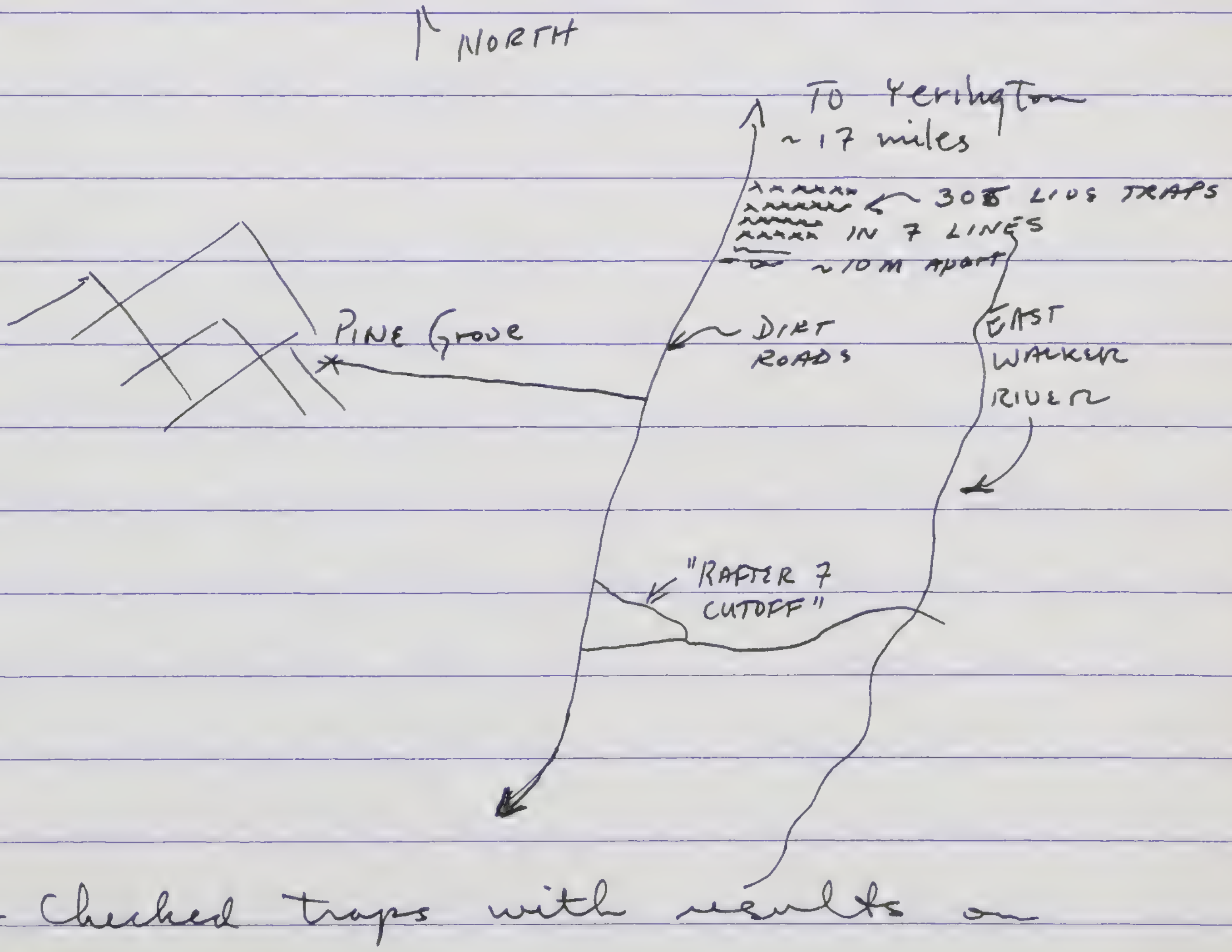
# Journal

18 September

## Vicinity S. Yerington, Lyon Co., Nevada.

Yesterday afternoon ~1630 we noted what was probably a Cooper's hawk flying near the mines at Pine grove. Not a positive identification, however. We also noted a few Cottontails (*Sylvilagus*) in the brush adjacent to the Pine Grove mines.

Map for trapping Locality of 17-18 Sept.




0730 - Checked traps with results on following page.

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18 September — Vicinity S. of Yerington, Lyon Co., Nevada.

Results:

17 mi S, 5 mi E. Yerington, 5000 ft.
Lyon Co. Nevada

12 *Dipodomys microps*
18 *D. merriami*
7 *D. ordii*
12 *Microdipodops pallidus*
12 *Perognathus longimembris*

Success = 61/305 = 20%

We released all but the *Microdipodops*, which will be used for John's study. On our return trip to Pine Grove (camp) we noted a burrowing owl (*Speotyto*) alongside the road perched on a small mound of dirt. We spent the day skinning the *Microdipodops* — (we also collected ectoparasites and sperm samples.)

1600 - We decided to set 190 traps in the near vicinity of where we trapped last night and ~ 115 traps in the Alkali Lake area (to catch *M. megacephalus*). We drove to the *M. pallidus* area (see above) where we set the 190 traps in a

18 September (con't) Vicinity S. of Yerington, Lyon Co. Nevada.

grid with traps ~ 10 paces apart and ~ 10 meters between rows. We chose an area approximately 400 m. southerly of the area in which we trapped last night - the shrubs and small grasses were ~ 50% denser in this area, and the soil was sandy, but somewhat coarser than last night's locality. (We changed localities because 1) we had trapped the first locality only last night and 2) we hoped to get a larger % of M. pallidus from this new area for John's study.

1730 - We proceeded toward the Alkali Lake area to set the remaining traps.

1830 - We noted 3 Pronghorned Antelope (Antilocapra), all does, crossing the road ~ 7 mi. NE of Fletcher, Nevada. The antelope stopped approx 300 m from the car allowing us to photograph them. They all appeared to be adults in good health.

1945 We arrived at the trapping locality and set out 2 sets of

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8 September (con't) 17.5 mi S, 6.5 mi. W. Hawthorne, 7040 ft, Mineral Co. Nevada. (Alkali Lake)

traps, one set of half the traps in the valley adjacent to the lake and one set on the ridge south of the lake basin. There was a very small moon tonight and a slight breeze from the north. We camped on the ridge overlooking the dry lake.

9 September 17.5 mi. S., 6.5 mi. W. Hawthorne, 7040 ft. Mineral Co. Nevada. (Alkali lake)

0600 we arose and checked traps with the following results:

8 *Microdipodops megacephalus* (1 dead in trap, 1 torpid) - very cold night

2 *Dipodomys panamintinus*

3 *Peromyscus maniculatus*

Trapping Success: 13/65 = 20%

We proceeded back through Fletcher toward Yerington to check the remainder of our traps; Along the way we again

19 September (con't)

Vicinity S. of Yerington, Lyon Co. Nevada

saw the Antilocapra (this time 2 does) in the same canyon 7 mi. NE Fletcher. They again showed curiosity and stopped to watch us.

1000 We arrived at the trapping site and checked traps:

17 mi. S., 5 mi. E Yerington, 5000 ft, Lyon Co. Nevada.

Results:

8 Dipodomys merriami
1 Onychomys leucogaster
1 D. ordii
3 D. microps
1 Perognathus longimembris
1 Ammospermophilus leucurus

Success:
$15/190 \doteq$ 8%

Apparently the very minor change in habitat between this locality and that of ~~has~~ the previous night's trapping explains the fact that we caught no M. pallidus here and caught 12 M. pallidus only 400 m away from

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9 September (con't)

17 mi. S., 5 mi. E Yerington, 5000 ft. Lyon Co. Nevada

here — M. pallidus appears to be extremely habitat selective.

1130 We collected up gear and drove via Yerington to L.A. Although we had hoped for better Microdipodops captures this trip, John did increase his sample sizes for both species. I managed to get only 2 Onychomys leucogaster for my voice ~~at~~ analysis studies.

27 September

5.5 mi. ENE Johannesburg, San Bernardino Co. California, 3200 ft. [T29S, R41E, SE 1/4 sec. 23] "Camp 2"

2130 We arrived here with 100 live traps in an attempt to trap more D. merriami that live in allopatry from D. panamintinus. We released ~50 animals that we no longer needed — (these were released ~400 meters off Trona Rd. on the dirt road leading to this camp. (see map). We set the traps in a locality about 200-300 meters South of where we had set them 30 August 1974.

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1974

Journal

7 September (con't)

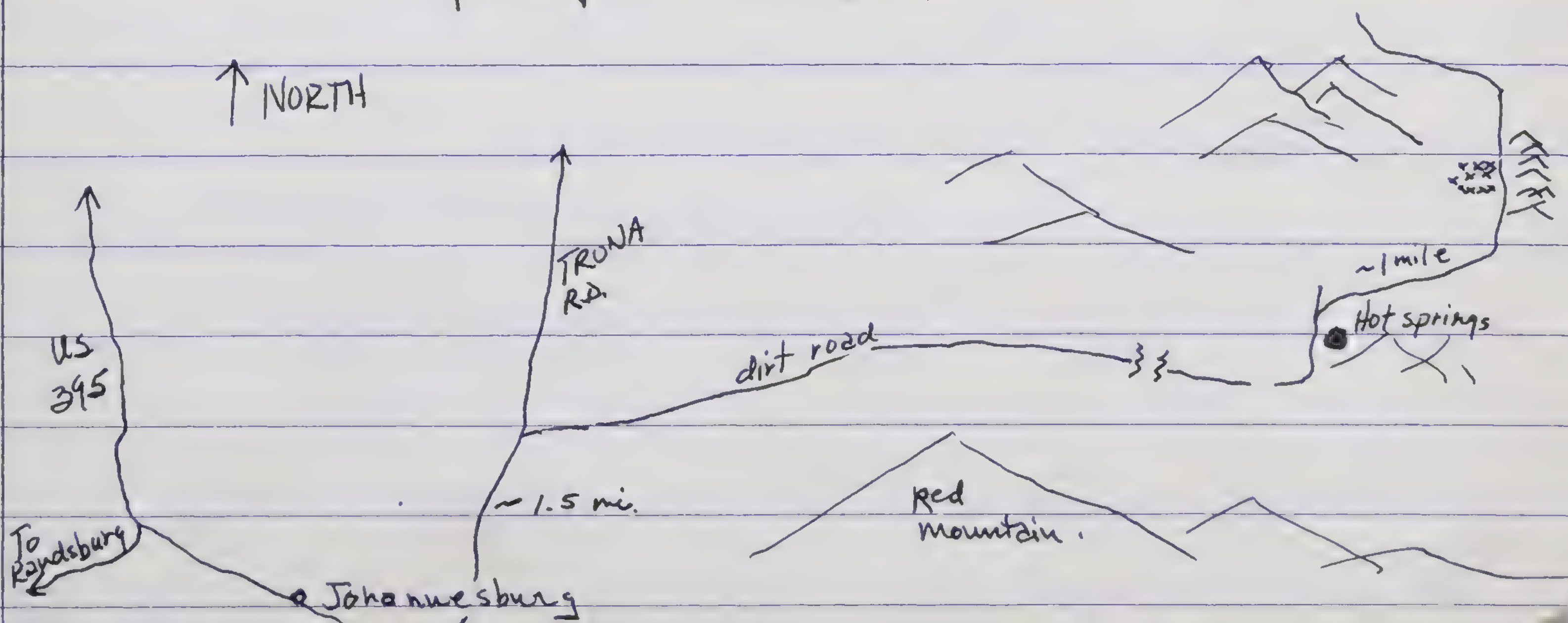
5.5 mi. ENE Johannesburg, San Bernardino Co., California, 3200 ft [T29s, R41E, SE 1/4 sec 23] "camp 2"

This different trapping site is somewhat more densely vegetated - Larrea are still small (~1 meter in height) and widely spaced. The moon was full or nearly so. We heard what appeared to be the hoots of a small owl (Sawwhet?) and a Great Horned owl (Bubo) flew low overhead many times. (On the ~~road~~ main highway (14) about 1 mile N. of Mojave we had noted a Kit fox (at about 8:30 (2030) this evening).

28 September

5.5 mi. ENE Johannesburg, San Bernardino Co., California, 3200 ft. [T29s, R41E, SE 1/4 sec 23] "camp 2"

Map of Locality.



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28 September (con't)

5.5 mi. ENE Johannesburg, San Bernardino Co., California, 3200 ft. [T29S, R41E, SE1/4 sec 23] "camp 2"

0700 we arose and checked traps with the following results: [I had checked traps at 0100 this morning and found that we had captured a D. panamintinus which meant that D. merriami was not allopatric in this area as we had previously thought. This was rather depressing as we had already used one sample from a nearby area in our experimentation — There is still a possibility that the sparse habitat in which we trapped previously (30 August) does only have D. merriami — further trapping will only show — ]

Results:

10 Dipodomys merriami
7 Dipodomys panamintinus
18 Perognathus formosus
2 Peromyscus (sp?) eremicus?

Trapping Success = 37/100 = 37%

The differential results between this night's trapping and that of 30 August (eg. P.

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# Journal

28 September (con't)

5.5 mi. ENE Johannesburg, San Bernardino Co., California, 3200 ft. [T29S, R41E, SE 1/4 sec 23] "Camp 2"

longimembris was caught at the other locale and not here) might support the thought that D. merriami exists as the only Dipo. in the other locality.

0830 we headed west toward Tehachapi Pass where we had arranged to meet David and Diane. On our way, we stopped to look at California City... not too impressed. About 1 mile W. of Randsburg we saw a lone Chuckar along the roadside.

1100 Met David and Diane, (who had brought along Nancy Walker and Barry Lotz). We proceeded slowly from Sand Canyon (see 17 July 1974) through Tehachapi into Cummings Valley, looking all the way for Dipodomys habitat — we noted some areas near the Cement Factory at Monolith and some other suitable localities about 2 miles West of Tehachapi toward Cummings Valley. We will probably trap out these areas at a later date.

The previous night Dave had

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# Journal

28 September (con't)

5.5 mi. ENE Johannesburg, San Bernardino Co., California, 3200 ft. [T29S, R41E, SE 1/4 sec 23] "Camp 2"

trapped in a sagebrush area on the perimeter of Cummings Valley. He captured:

6 *Dipodomys agilis*
1 *Reithrodontomys (megalotis)*

We're not sure yet how this fits in with previous data, however we have yet many more apparently suitable locales to check.

1230 - We proceeded into Mojave - along the way David collected a *Bubo* skull from a road kill East of Monolith. We ate lunch in Mojave and proceeded to Camp 1.

28 September con't

2 mi. E. Searles Station, 9 mi. NNE Johannesburg, San Bernardino Co., California 3200 ft "Camp 1" (This will be my new locality for camp 1)

1500 We arrived here and walked up to the Gopher diggings S of camp - there had been rain in the last few weeks and none of the Gopher mounds looked very fresh. We noticed a horned lizard

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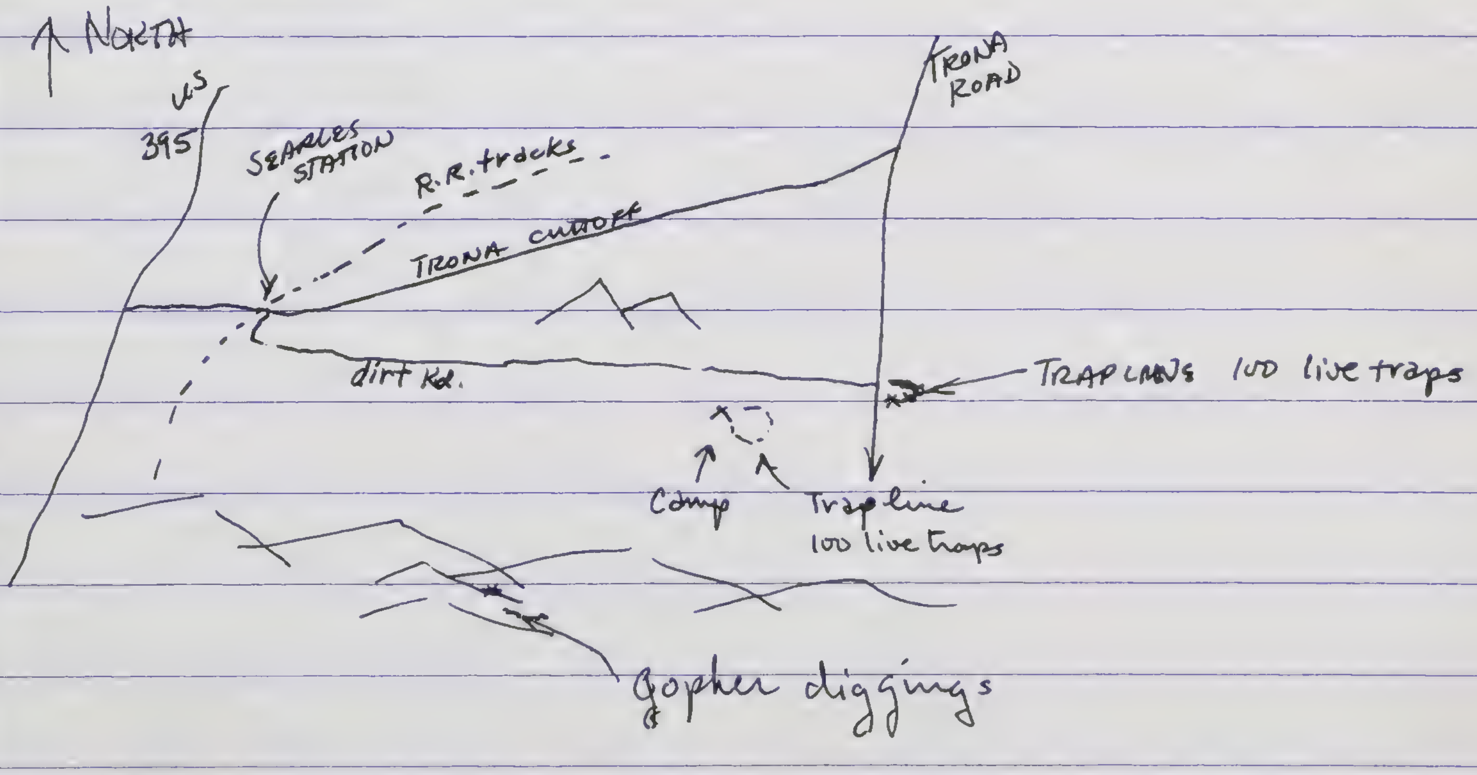
28 September (con't)

Z mi. E Searles Station, 9 mi. NNE Johannesburg, San Bernardino Co., California, 3200 ft. "Camp 1"

among other lizards along the way, and I spotted a rather large Tortoise (Gopherus) Ad ♂. ~2.7 kg. Barry later measured and photographed the tortoise in connection with his project.

1700 We set 100 traps near camp in a semi-circle to facilitate checking each hour. The remaining 100 traps were set across the road (Trona Rd.) in the exact locality as 18 August 1974. These were checked ~~t~~wice during the night and all Dipodomys and Onychomys were kept.



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# Journal

29 September

2 mi. E Searles Station, 9 mi. NNE of Johannesburg, San Bernardino Co., California, 3200' ft "Camp 1"

1900 The nearly full moon was up at sunset. The sky was clear, light breeze, and a fairly warm night. We began checking traps at 1900. (approx. sunset.)

Results:

| | D.p. | D.m. | P.f | P.s | O.t. | P.m. |
|---|---|---|---|---|---|---|
| 1900–2000 | ♀, ♀, ♀, ? | ♀, ♀, ♂, ?* | 1 | 7 | – | – |
| 2100 | ♀♀♀♀ ♂ | ♀♀ | 1 | 8 | – | – |
| 2200 | ♀, ♀, ♂, ♂, ? | ♀, ♀, ♂ | 1 | 7 | – | – |
| 2300 | ♀♀♀♀♀ ♂♂ | ♀♀♀ ♂ | 1 | 8 | 1 | – |
| 2400 | ♀♀ ♂♂ | ♀♀ ♂ | 4 | 5 | – | 1 |
| 0100 | ♀♀♀♀ ♂♂♂ ? | ♀♀♂ ? | 5 | 7 | – | – |
| 0200 | ♀♀♀ ♂ | ♀ ♂ | 2 | 5 | – | – |
| 0300 | ♀♀ ♂ | ♀ ♂ | 2 | 3 | – | – |
| 0400 | ♀♀♀ ♂♂♂ | ♀♀ ♂ ? | 3 | 6 | – | – |
| 0500 | ♀♀♀♀♀ ♂♂♂♂ | ♀♀ | 3 | 4 | ** 1 | 1 |
| Still quite dark → 0600 | ♀♀ ♂♂♂♂♂ | ♀ ♂ ? | 3 | 5 | 1 | – |
| very light → 0700 | ♀ ♂♂ | ♀♀ | 1 | 3 | – | – |

* "?" means the animal escaped before being sexed.

Moonset ~0500

** The *Onychomys* were removed when ~~ca~~ captured.

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| | |
|---|---|
| 29 September (con't) | 2 mi. E Searles Station, 9 mi. NNE of Johannesburg, San Bernardino Co., California 3200 ft. "camp 1" |
| | As mentioned before, the traps across the Road were checked twice through the night and once more at ~0800. The results: |
| | 16 Dipodomys < ~10 D. panamintinus, ~6 D. merriami |
| | 12 P. longimembris |
| | 7 P. formosus |
| | 7 Peromyscus maniculatus |
| | 4 Onychomys torridus |
| | Since these were checked thrice, I didn't figure-out "success". |
| | 0900 – We collected up traps, broke camp, and headed for L.A. |
| 4 October | 5.5 mi. ENE Johannesburg, San Bernardino Co. California, 3200 ft. [T29S, R41E, SE 1/4 sec 23] "camp 2" |
| | We left Los Angeles ~6:20 PM (1820) and arrived at this locale ~9:00 (2100). The wind was blowing very strongly in Mojave and along Hwy 14, but this area was quite still. The moon |

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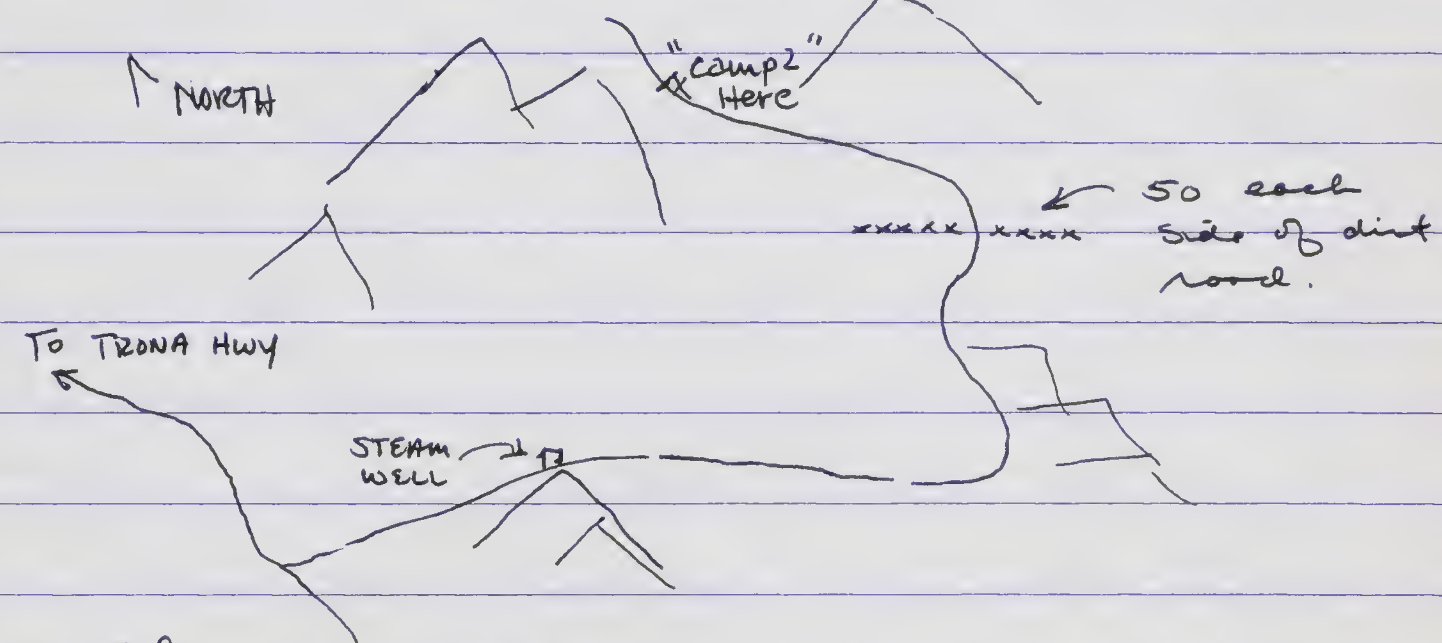
4 October (con't)

5.5 mi. ENE Johannesburg, San Bernardino Co. California, 3200 ft. {~~F32S~~ [T29S, R41E, SE1/4 sec 23] "Camp 2"

was nearly full and the temperature ~65° F. We set out 100 live Traps each side of the dirt road approximately 1 mi. S.E of camp. (see map).




The plants were fairly wide spaced, (Larrea), Rocky substrate. Occasional evidence of Neotoma work. 2200 After setting traps, we drove to Camp 1 (see following locality) to me Connie and Ray. The wind at Camp 1 was considerably worse and (therefore) it was somewhat cool. We set out 106 Traps either side of camp (East and west.). Ray and Connie didn't arrive until

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| | |
|---|---|
| 4 October (con't) | 2 mi E Searles Station, 9 mi. NNE of Johannesburg, San Bernardino Co., California, 3200 ft. "camp 1" approximately 0230 Saturday morning, by then the wind had calmed down to only a small breeze. |
| 5 October | 2 mi E. Searles Station, 9 mi. NNE of Johannesburg, San Bernardino Co., California, 3200 ft. "Camp 1" 0700 - I arose and drove to the previous night's locality to check traps. At 0730, as I was leaving, I heard several Coyote calls in the hills to the south of camp. The sun had been up (actually not yet above horizon, however quite light outside) for at least 1 hour. ~~The~~ men I stopped and talked to the old man at the steam well near "camp 2" (see map) He is in a wheel-chair and hears quite poorly - (There were also 2 younger guys having coffee with him.) The old man was very friendly and told me of some indian petroglyphs about ½ mile directly north of his place (in the hills). The |

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5 October (con't)

Various locales approximately 5 miles NE of Johannesburg, San Bernardino Co. California 3200 ft. "Camp 1 and 2"

younger fellas were rather cold and showed distrust of me. I told the old man that I was trapping "rats" and he suggested I set some around his place to rid him of "them dang pack rats". One of the younger guys said that they had recently shot one of their dogs which was rabid (Possibly plague?)
I checked traps with following results:

5.5 mi. ENE Johannesburg, San Bernardino Co., California, 3200 ft [T29S R41E, SE¼ sec 23] "camp 2"

1 *Neotoma lepida*
12 *Perognathus formosus*
4 *Dipodomys merriami*
2 *Dipodomys panamintinus*

Success = 19/100 = 19%

Since I captured some *D. panamintinus* here, I cannot consider this a *D merriami* allopatric area, so I didn't keep any of the animals. I drove back to Camp 1, noting an adult

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5 October (con't)

Various locales NE of Johannesburg, San Bernardino Co, California, 3200 ft. "Camp 1 and 2"

coyote (*Canis*) cross the road immediately ahead of me about 2 miles NE of Johannesburg along Trona Rd. I pulled to the side of the road and stopped. The Coyote stopped also about 50 meters west of the road and watched me. We looked at each other for a while and he eventually loped off. This was approximately 0830 and the sun was quite high by now.

When I returned to camp, Darcey had checked the remaining 106 Traps with the following results:

2 mi. E. Searles Station, 9 mi. NNE of Johannesburg, San Bernardino Co, California, 3200 ft. "camp 1"

8 *Dipodomys panamintinus*
6 *Dipodomys merriami*
1 *Perognathus longimembris*
2 *Perognathus formosus*
1 *Peromyscus maniculatus*

Success = 18/106 ≐ 17%

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| | |
|---|---|
| 5 October (con't) | 2 mi. E. Searles Station, 9 mi. NNE of Johannesburg, San Bernardino Co. California, 3200 ft "Camp 1" |

I returned all the *Dipodomys* to the lab for activity period study. Connie, Ray, Darcey, Barron and I walked around the hills S of camp for an hour or so and noted little more than a horned lizard and other lizard species.

1200 - We drove through Johannesburg and Randsberg and ate lunch on the rocky hills about ½ mile west of Randsburg.

1300 - We packed-up and headed for Los Angeles.

11 October 11.8 mi. E Boron, San Bernardino Co., 2500 ft. California

1830 Darcey, Baron, and I left L.A and arrived near Boron ~2100. We ~~dro~~ drove a very short distance north of "4 corners" on 395 and turned East on a dirt road paralleling the power lines. There were puddles along the

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11 October (con't)

11.8 mi. E. Boron, San Bernardino Co., 2500 ft. California

road and later we learned that ~1½ inches of rain had fallen the previous Monday 7 October. The fact that puddles still remained was quite amazing. We drove along the road until we were forced to stop at a deep wash-out. We camped and set out 206 live traps in several directions from camp. The plant community was predominantly *Atriplex* with very sparse and small *Larrea* and even fewer *Cholla*. (no *Yucca* in this area.) There were numerous recent washes indicating considerable flooding.

2230 - We were setting traps near a small knoll West of camp when I noticed a pair of eyes reflecting my searchlight beam. I walked towards the eyes and saw an adult kit fox (*Vulpes macrotis*). The fox approached me and then retreated. 'He' was very reluctant to leave the area and continually approached & retreated. After ~5 minutes, the fox retreated out of

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11 October (con't) 11.8 mi. E Boron, San Bernardino Co. 2500ft.
California

sight to the South of camp. About ½ hour later Darcey noticed the fox within about 8 meters of where we were standing. The fox squinted its eyes as I shined my searchlight toward it, but did not retreat for several seconds. We followed the fox for a short while and watched it rub its cheek on a telephone pole nearby and then retreat again to the south. The fox was completely silent – there was no wind and yet we heard nothing.

12 October 11.8 mi E. Boron, San Bernardino Co. 2500ft.
California

0700 We arose and checked traps with the following results:

9 *Dipodomys merriami*
4 *Perognathus longimembris*

Success: 13/206 ≐ 6%

Our original hope was to find a place where only *D. merriami* lives, and we believe this is the place.

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12 October (con't) 11.8 mi. E Boron, San Bernardino Co. 2500 ft California

During trap checking we noticed various parts of an old tortoise shell, several (tortoise?) holes near the base of *Atriplex* bushes, and a few small annuals beginning to sprout (~7 mm. tall). The kit fox had apparently disturbed several traps (we found the traps in shallow holes where the (fox?) had attempted to get into them). There were feces (fox?) inside one of the large boxes used to carry the non-folding traps, and also feces and musky liquid on top of a few traps. The feces contained rodent skull fragments.

0900 - We broke camp and headed for L.A. We later drove to San Diego to visit Darcey's Relatives.

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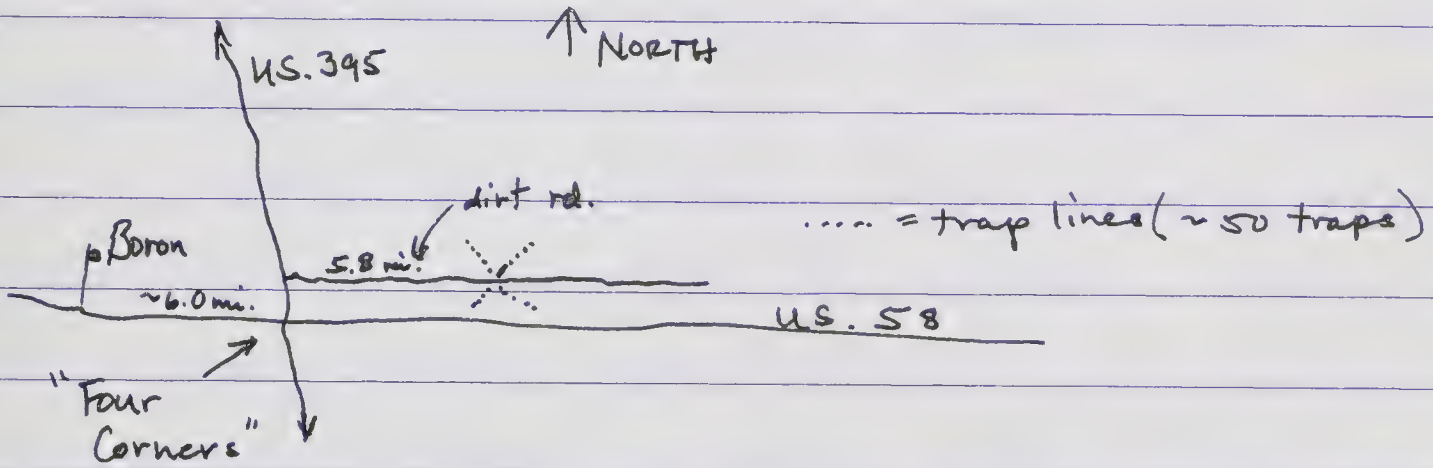
18 October 11.8 E. Boron, San Bernardino Co., 2500 ft. California

Darcey, Barron, Paul Rubin, Casey Clow and I left L.A at ~1815. (They went in seperate car.) We arrived just S. of Mojave ~1945 where we released ~34 Dipodomys which had been used in previous tests. We arrived at the trapping site ~2100 and immediately began setting out 207 traps as below.




The kit Fox noted last week at this locale was seen on numerous occasions this night.

We went to sleep approximately 0130. The sky was clear, no moon. ~60°F. ~~clear~~. calm; occasional very light breezes.

19 October 11.8 mi. E. Boron, San Bernardino Co., 2500 ft California

We arose at 0630 and checked traps with following results:

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19 October (con't)

11.8 mi. E. Boron, San Bernardino Co. 2500 ft. California

Results (con't):

10 *Dipodomys merriami* 9♀♀, 1♂♂
1 *Perognathus formosus*
1 *Tarantulla*.

Success = $11/207 \doteq 5\%$

As expected, (and hoped) we caught no *D. panamintinus* and these samples of *D. merriami* can be used for my allopatric sample.

Paul and Casey left after breakfast and Darcey & I walked along the dry creek bed about 1 km. south of camp. This is apparently just a seasonal wash surrounded by more lush vegetation (and perhaps *D. panamintinus*?)

We noted, again, evidence of the Fox on almost all traps (droppings or urine). We found 2 live tortoises (extremely large) and 2 ~~dead~~ wash empty tortoise shells. Measurements were taken on all specimens. (See below.)

1000 we drove into "four-Corners" and got ice for our ice-chest. The

# Journal

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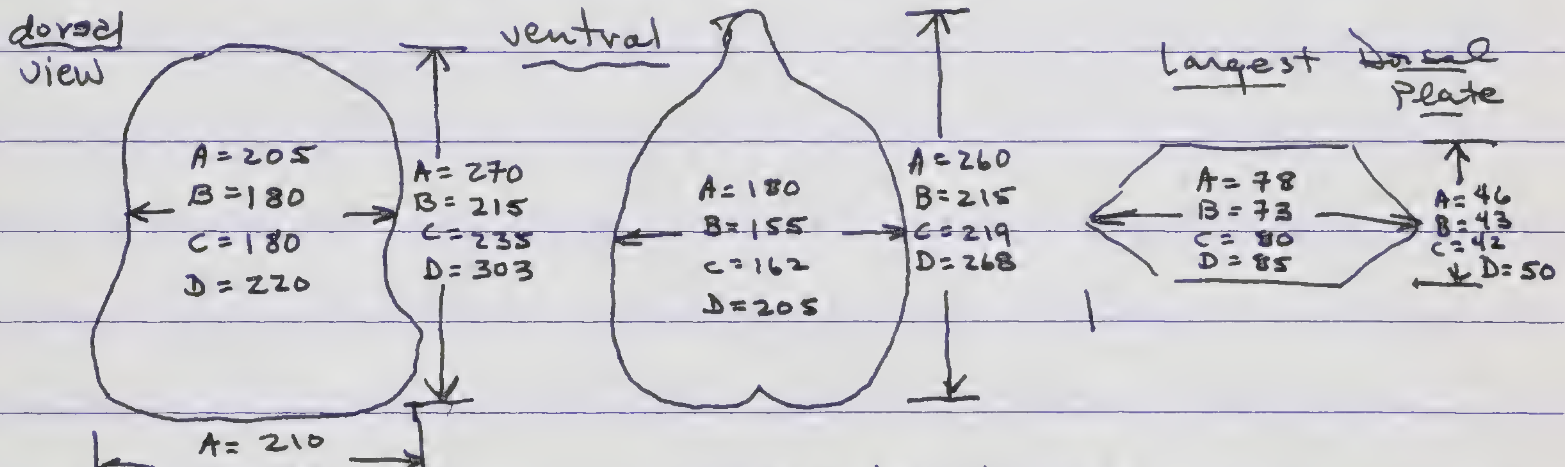
19 October (con't)

11.8 E. Boron, San Bernardino Co., 2500 ft, California

High temperature for the day was approximately 90° F and not especially uncomfortable due to a light cloud cover in the afternoon. There were light breezes most of the day.

Tortoise (Gopherus) measurements:

4 measured A, B, C, and D.




A= 210
B= 175
C = ~~225~~ 185
D = 225

greatest height = A = 125
B = 115
C = 95
D = —

A = Ad ♂ - right front claws chewed off, center of each dorsal plate was "bumpy". very large "flare" over hind legs. Very long "ram" - large feet, large bump on dorsal posterior shell - profile =

B = dead Ad ♀ - very small "flare" over hind legs making breadth in center of dorsal shell wider than posterior breadth. Skeleton of hind-quarters left intact. (Returned to lab.)

C = dead Ad ♀ (eggs) - Recently run over by car. Most of skeleton remains intact.

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19 October (con't) 11.8 mi. E. Boron, San Bernardino Co., 2500 ft. California

D = Ad ♂ (live) - Very round shell (not angular) smooth centers on all dorsal plates. Small bump on hind dorsum; small flares over hind legs.

In general, much variation in shell shape and texture is noted above.

1600 - We began to set 197 traps about 100-200 meters West of last night's trapping site. One line of 50 traps entered a sparse *Larrea* community, another approached the wash and entered an area of more lush vegetation (These two lines caught the great majority of the animals). While setting traps, we noted a small sidewinder (*Crotalus cerastes*) approximately 150 mm long, and a moderate sized horned lizard (*Phrynosoma*). We flushed out a large Jackrabbit (*Lepus californicus*). The sun set approximately 1830. Sky clear.

20 October 11.8 mi. E. Boron, San Bernardino Co., 2500 ft. California

We arose and checked traps ~0700. with following Results:

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20 October (con't) 11.8 mi E. Boron San Bernardino Co., ~~3~~ 3500 ft.
California

Results: 10 *D. merriami* 7 ♀♀, 3 ♂♂
1 *Ammospermophilus leucurus*
3 *P. longimembris*

Success = 14/197 ≐ 7%

Last night (18-19 Oct.) we caught only 1 *D. merriami* in the "McNeil Type" traps. Last night (19-20 Oct.) we caught no *D. merriami* in McNeil Type traps. (I believe the kit fox visited each trap and removed any captured animal).

The *A. l.* was captured in the *Larrea* association as were 2 of ~~as was~~ the *P. longimembris*. One *P. longimembris* was semi-torpid; the night was rather cold.

1000 - We collected traps and headed for L.A. All *D. merriami* were taken to the lab for study.

8 November Vicinity of Tehachapi, Kern Co. California ~4000 ft.

Darcey, Barron, and I left L.A ~1830 and met Dave near Sand Canyon ~2030 (Diane was sick and couldn't make the trip). The sky was overcast, and the night was cold and windy. We drove to a locality just

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Vicinity of Tehachapi, Kern Co. California ~4,000 ft.

8 November (cont) NW of Tehachapi and began setting traps. Dave had located a few likely habitats for *Dipodomys* in the vicinity of Tehachapi. We set 30 traps 0.3 mi NW. of Tehachapi, in a field adjacent to the freeway and a housing track. There was low, dense brush, some *Chrysothamnus*.

We then proceeded to a somewhat larger field just off Hwy 202, 2 mi West of Tehachapi. Here we set 50 traps. Somewhat higher, denser vegetation. We flushed out a *Sylvilagus audubonii*.

We then drove to a campground 0.3 mi. NE. of Tom Sawyer lake, where we established camp; the remaining 91 traps were set in a brushy canyon at this locality. (Campground was actually somewhat west of above locality).

9 November Vicinity of Tehachapi, Kern Co. California, ~4,000 ft.

0600 we arose and checked traps with the following results:

① 0.3 mi NW. Tehachapi, Kern, Co. California, 4,000 ft, [T32S, R33E, NE 1/4 sec 20]

no captures / 30 traps.

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9 November (con't) Vicinity of Tehachapi, Kern Co. California, ~4,000 ft.

Results (cont):

(2) S. side Hwy 202, 2 mi. W. Tehachapi, 4,000 ft. [T32S, R32E, E½ sec. 24]
1 *Reithrodontomys megalotis*
(50 traps)

(3) 0.3 mi. N.E. Tom Sawyer Lake, 0.9 mi W. Hwy 58, 3 mi. NW Tehachapi, 4000 ft [T32S, R32E, SE ¼ sec 12]
2 *Perognathus californicus*
5 *Peromyscus maniculatus*
– saw several *Sylvilagus audoboni*
(91 Traps)

0730 While at the last trapping site, Dave and I walked over to a rather large canyon where we had spotted a large, adult Red-tailed Hawk (*Buteo*). We found 5 (hawk) pellets, one especially large (~100 mm.)

We drove around during the day searching for suitable *Dipodomys* habitat. In the P.M. we hiked in the large canyons N. of camp. We noted several (5) Red-tails in the sky over us (frequently screaming.)

1500 – we began setting traps. Our first set was 75 traps on Woodford-Tehachapi

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9 November (con't) Vicinity of Tehachapi, Kern Co., California, ~4000ft
Rd. 0.9 mi. SE of Keene. This was a gently sloping field surrounded by small oaks. The brush was low and occasionally dense. The ground was covered with annual grasses.

The second set of traps was in the same locality (0.3 mi. NE Tom Sawyer Lake) as last night. 75 traps were set here (in an adjacent canyon to that one we trapped last night.)

We decided to set ~40 traps in Sand Canyon so that I could get a sample for my activity period studies. After setting traps, we drove into town, bought beer, and went back to camp to relax. The day was quite cold (low 40's F°) and windy. The overcast was total, but light.

10 November Vicinity of Tehachapi, Kern Co., California, ~4000ft
0730 - we arose and checked traps with the following results:

(1) 0.9 mi. S.E. of Keene, E side of Woodford-Tehachapi Rd. [T31S, R32E, NE¼ sec 28]

26 *Peromyscus maniculatus*

MSH 29 1 *Microtus californicus*

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10 November (con't)

Vicinity of Tehachapi, Kern Co. California ~4000 ft.
2 traps in this locality had 2 P.m. in them; in one case, both were alive, in the other case, an ad. had eaten the entire skull contents of a juvenile.
Success = 27/75 = 38%

(2) 0.3 mi. NE. Tom Sawyer Lake, 0.9 mi W Hwy 58, 3 mi. NW Tehachapi, Kern Co, California, ~4,000 ft [T32S, R32E, SE 1/4 sec 12]
8 Peromyscus maniculatus
3 Reithrodontomys megalotis
[2 R.m. in one trap, one dead; other had eaten skin off head and eyeballs.]
Success = 11/75 = 14%

(3) Sand Canyon, 0.4 mi. N. Hwy 58, 2.9 mi. E x S of Monolith, Kern Co. California, 3949 ft.
14 ~~13~~ Dipodomys panamintinus (1 dead)
15 Peromyscus maniculatus
The P.m. were very large. Upon returning the Dipodomys to the lab. it was seen that the ♂♂ were scrotal, but the ♀♀ showed no signs of reproductive activity. These D.p. were monitored 10 Nov. - 17 Nov.
We ate breakfast at Mojave and headed home. Dave came to LA. with us - headed N. ~6:00 PM.

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Journal

1975

Calif.

New Mexico

Utah

Hafner m.s.
1975

# Journal

January, 1975

to

December 1975

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11 January 2 mi. E. Searles Station, 9 mi. NNE of Johannesburg, San Bernardino Co., California, 3200 ft. "Camp 1"

We left L.A at ~11:30 with Barry Lotz and arrived at the Boron locality ~2 PM. (11.8 mi. E Boron) We walked around for awhile. (Barry found an old Tortoise shell which still had skeleton in-tact excepting skull). There was occasional short annual vegetation, but not alot. One Dipo. burrow system (which I photographed) was approximately 6 meters in diameter with numerous small diggings covering the entire area (surface caches?) There were no seeds found in any of the small holes examined. The air was cool (~60° F) and there was no clouds nor wind. We set out 100 Snap traps 1600 we left this site and drove north on U.S. 395 to "Camp 1". We set out 200 live traps on the East side of ~~Johan~~ US# Trona Road near the above locality. Sunset was approximately 1730 at which time we made camp, ate, and went to bed. The vegetation in this

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2 mi. E. Searles Station, 9 mi NNE of Johannesburg, San Bernardino Co, California 3200 ft. "Camp 1"

11 January (con't) locality was more dense with numerous patches of greenery (very low, however). There was much rodent activity evidenced by much surface diggings. The evening was very cold (< 30° F) and it remained calm all night. Clear sky.

12 January 2 mi. E. Searles Station, 9 mi. NNE of Johannesburg, San Bernardino Co, California 3200 ft. "Camp 1".

We arose ~0700 and checked the live traps at this locality with the following results:

5 Dipodomys panamintinus (4 ♂♂, 1 ♀♀)
[all ♂♂ scrotal, ♀ vagina extremely swollen [wts. in lab. data]
2 D. merriami (1 ♂, 1 ♀)
[♂ scrotal, ♀ vag. closed] [wts. in lab. data]

7/200 = 3.5% success.

1 Dipodomys panamintinus escaped = 8 total

It was recorded as to whether an animal was captured near a bush or in the open [in lab. data].

0900 We broke camp and drove to

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2 mi. E. Searles Station, 9 mi. NNE of Johannesburg, San Bernardino Co. California
3200 ft. "Camp 1"

12 January (con't) the Boron camp to check the snap-traps. [I didn't mention that the traps at camp 1 had been bothered by a predator, the tracks appeared to be those of a Kit Fox (*Vulpes macrotis*). Small amounts of urine (musky) were found on top of several traps]. At Boron Camp (11.8 mi E. of Boron) we caught the following:

12 January (con't) 11.8 mi. E. Boron, San Bernardino Co. 2500 ft. California.

1 *Onychomys torridus*

1/100 = 1%

1130 we drove home to L.A. The Dipo's from Camp 1 will be used in Behavioral and seed caching studies. I had hoped to get animals from Boron for Morphometric studies, but caught none [even though there was occasional *Dipodomys* activity at this locality.]

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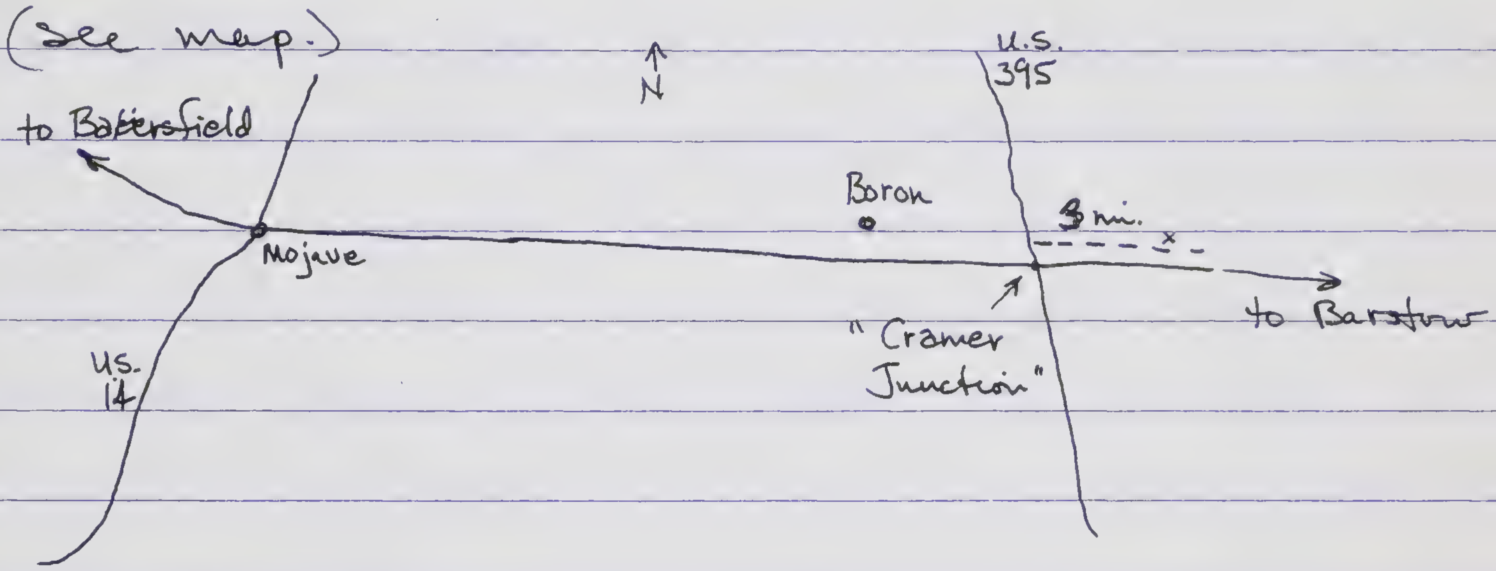
1975

9 mi. E. of Boron, San Bernardino Co., 2500 ft. California.

17 January Darcey, Barron, and I left L.A. at 1830 and arrived at this locality ~2100. (see map.)




The weather was quite cold (mid-20's F°) but wasn't bad as there was no wind. We set out ~~294~~ 194 traps (all live) in the *Atriplex*-*Larrea* community. There were few signs of *Dipodomys* activity. Moon-set ~1030. Clear.

18 January 9 mi. E. of Boron, San Bernardino Co., 2500 ft. California.

0730 arose and checked traps with following results:

3 *Dipodomys merriami* 2 ♀♀, 1 ♂

Success = 3/194 = 2%

Barron somehow got the ♂ out of its trap and killed it; so I put that

# Journal

Hafner, M.S.
1975

9 mi. E. of Boron, San Bernardino Co,
2500 ft. California.

18 January [con't] specimen up later in the morning. [MSH 59]
Later, we dug up 2 D. pa. burrows (1♂, 1♀)
[See following pages] No seed caches were
found in either burrow - although surface
caches were seen in the vicinity of the
burrow systems. During the day we
walked around the area near camp -
the temp. was ~ 72° F and the day
was beautiful. We noticed numerous small,
fuzzy beetles (Meloidae?), But saw no
Tenebrionids. We saw numerous small
lizards (Sceloperous?) ~ ranging from
75 - 150 mm. in length overall. An adult
sparrowhawk (Falco sparvarius) ♂ was observed
in the later afternoon.
1430 - We set out 294 traps (100 snaps) in
a small canyon .2 mi. E of camp.
1700 - We had a really nice dinner. [A
bi-plane buzzed us about 1715!] The sun
set about 1730, we talked over coffee about
our future, etc. until about 2100. By this
time it was 35° F. 2130 we we to bed.
The low over night was approx. 25° F.
Very light breeze - sliver of a moon.

18 January [con't]

# Journal

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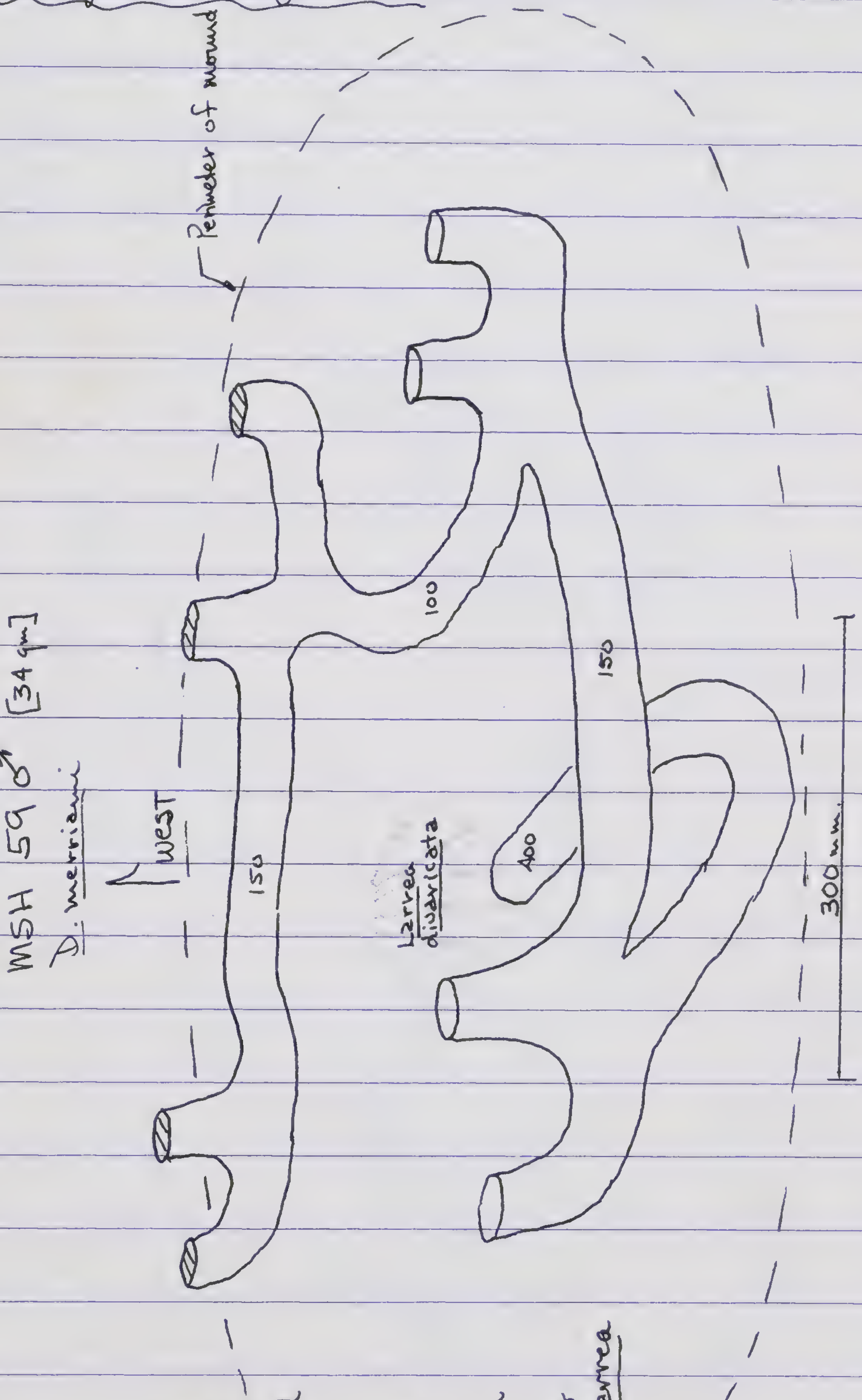
9 mi. E. of Boron, San Bernardino Co.
2500 ft. California




Numbers Represent Approx. depth below Surface of mound
Max. height of mound ≃ 250 mm.

⊘ - hole plugged

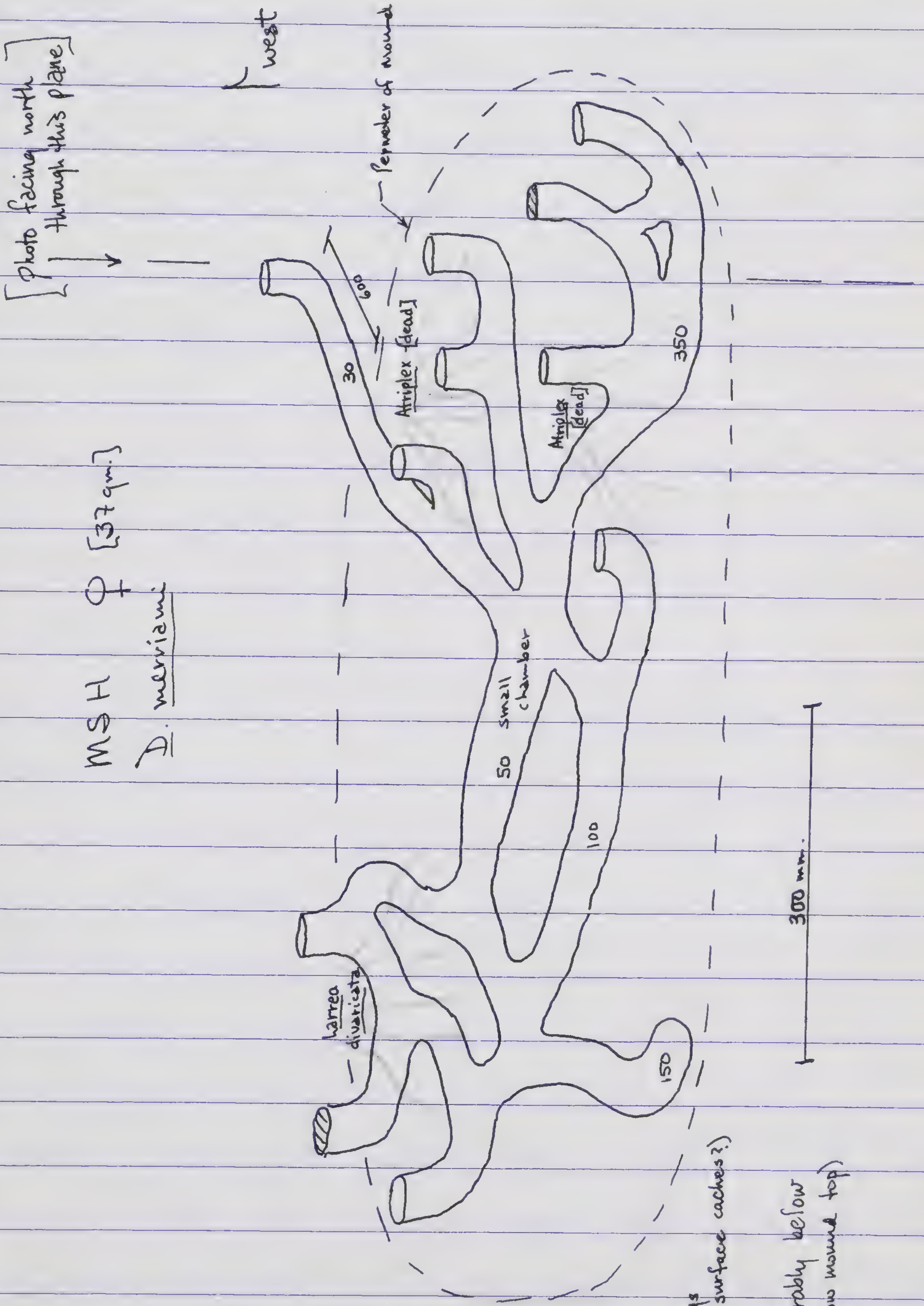
- no caches found in burrow system
- nest directly below root system of Larrea

Journal

Hafner, M.S.
1975

9 mi. E of Boron, San Bernardino Co. 2500 ft. California

18 January
[Con't]




- Mound approx. 200 mm. in height
- Numbers represent depth from top of mound
- no seed caches found in burrow
- Numerous shallow diggings surround mound (seed surface caches?)
- Soil hardens considerably below 200 mm. (400 mm below mound top)

# Journal

Hafner, M.S.
1975

9 mi. E. of Boron, San Bernardino Co, 2500 ft. California

19 January 0700 We arose (27°F) and checked traps with following results:

2 *Dipodomys merriami* (2 ♀♀)
1 *Ammospermophilus leucurus*

Success = 3/294 ≐ < 1%

We layed out in the sun for awhile — the day was beautiful. 1100 we left for L.A. This was a great trip, even though catches were poor.

24 January 2 mi. E. Searles Station, 9 mi. NNE Johannesburg, San Bernardino Co. California, 3200 ft. "Camp 1"

I drove up (with Barron) early in the day in order to set traps before sunset. [Darcey and Gretchen drove up later]. I set 194 live and 100 snaps along Trona Rd near the rocky outcropping near the floor of the Valley. The weather was beautiful; clear ~75°F. still. The nearly full moon arose approx. 1500. I noticed several lizards and numerous Meloid (?) beetles. 1700 - I made camp in the hills east of Trona Rd. It began to cool off quickly after sunset (~1730). I played bagpipes and talked with Barron until Darcey and Gretchen

Journal

Hafner, M.S.
1975

2. mi. E. Searles Station, 9 mi. NNE of Johannesburg, San Bernardino Co., California 3200 ft. "Camp 1"

24 January [con't] arrived at 2100. The sky was clear and there was a light, cool breeze. [Temp. and Rel. Humid. as per chart]. At approx. 2300 a group of people in several "Vans" arrived near our camp. They talked very loudly [in the still night] and proceeded to make camp about 100 yards from us. [They had noticed us]. They talked from car to car via loudspeakers and laughed and shouted while shooting shotguns. It was an appalling ordeal, and we finally moved camp a few miles East. [We could still hear the shotguns and music being played over the loudspeakers] The night was rather hectic.

2 mi. E. Searles Station, msH 9 mi. NNE of Johannesburg San Bernardino Co., California 3200 ft. "Camp 1"

25 January 0700 Arose and checked traps. [on our way to the trapping locality, we reversed several signs that the "Van people" had used to mark the way to their camp. ~ hopefully, their friends won't find them]. Results of Trapping;

live:
- 4 *Dipodomys panamintinus* [2 ♂♂, 2 ♀♀]
- 4 *D. merriami* [2 ♂♂, 2 ♀♀]
- 5 *Onychomys torridus*

2 *Ammospermophilus leucurus* (1 died in trap)

# Journal

Hafner, M. S.
1975

2 mi. E of Searles Station, 9 mi NNE Johannesburg
San Bernardino Co., California, 3200 ft. "Camp 1"

25 January [con't] [con't] trapping results:

snapped { 1 *Neotoma lepida*
1 *Onychomys torridus*
1 *Ammospermophilus leucurus* }

Success: $18/294 = 6\%$

1030 - We collected traps and drove to Tehachapi [Sand Canyon] where we set 100 live traps. We then gassed-up in Mojave and Drove to Boron locality.

1330 - Very warm at Boron locality - we walked around then set the remaining traps (194) we chose a trapping locality with more *Larrea divaricata* - since it appears that *D. merriami* prefer these schrubs [under which to build nests.]. The evening was cool and clear. A wind blew most of the night [~25 mph]

26 January 7.5 mi. E. of Boron, San Bernardino Co, 2500 ft. California.

0720 awoke and checked traps at this locality. The wind had died down. The temp. was ~50° F. The snap traps caught ~~nothing~~ 1 *Onychomys torridus* ♀ ⟷ We had better luck with live traps.

# Journal

Hafner, M.S.
1975

7.5 mi E of Boron, San Bernardino Co,
2500 ft. California

26 January (con't) Live trap results:

1 Perognathus longimembris
1 Ammospermophilus leucurus
1 Dipodomys merriami ♂ testis scrotal 37 gm.

Success = 3/194 ≐ 2%
Snap traps = 1/100 ≐ 1% [Onychomys torridus ♀]

I dug up the burrow system of the Kangaroo Rat [See following page]; I found a large scorpion [50 mm] in the burrow system. The Perognathus was an interesting catch this time of year.

0900 We drove to Tehachapi Pass and checked traps:

Sand Canyon, 0.4 mi. N of Hwy. 58, 2.9 mi E x S of Monolith, Kern Co. California 3949 ft. [T32S, R34E, NW1/4, sec 27]

Results:

16 Dipodomys panamintinus [7 ♂♂, 9 ♀♀]
6 Peromyscus maniculatus

Success: 22/100 = 22%

I noticed one Reithrodontomys megalotis beneath an old log in the same field. The burrows of one ♂ and one ♀ were excavated [following pages]. The ♀'s burrow

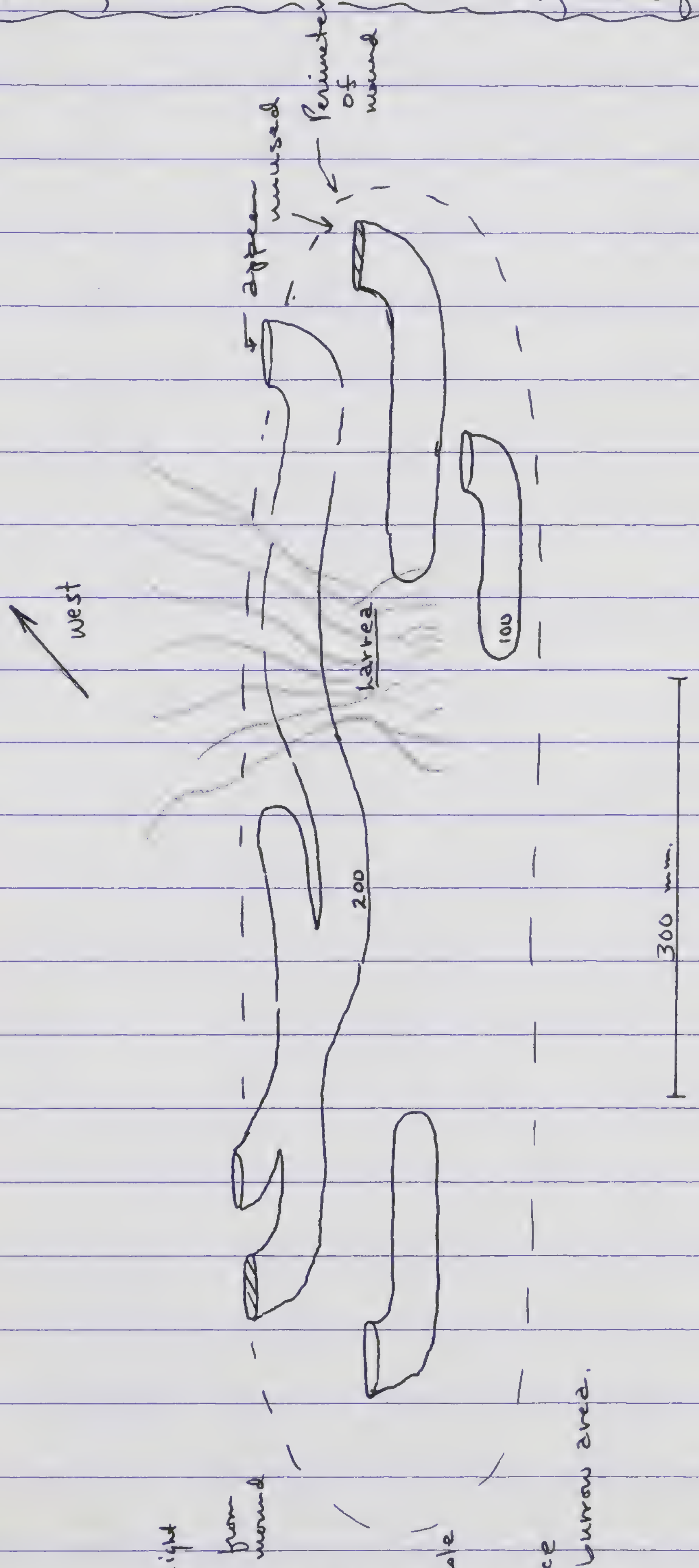
# Journal

Hafner, M. S.
1975

7.5 mi. E. of Boron, San Bernardino Co., 2500 ft. California

26 January

D. merriami ♂ (testis scrotal) = 37 gm




mound ≈ 200 in height

numbers = depth from top of mound

no seed caches found in burrow

⊘ = closed hole

numerous surface caches around burrow area.

# Journal

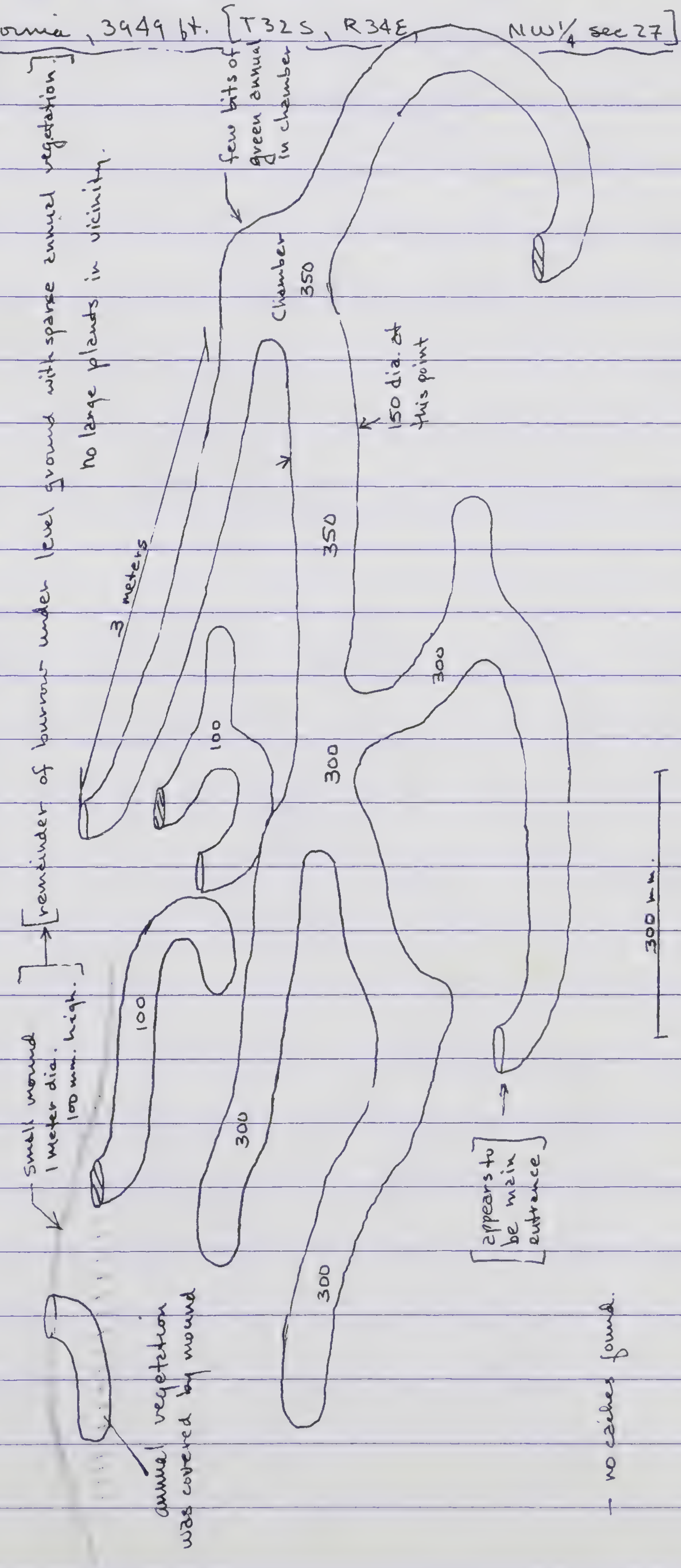
Hafner, M.S.

1975

Sand Canyon, 0.4 mi N. of Hwy 58, 2.9 mi. E x S of Monolith, Kern Co., California, 3949 ft. [T32S, R34E, NW¼ sec 27]

26 January

D. panamintinus ♂ testis scrotal 83 gm.




- no caches found.

# Journal

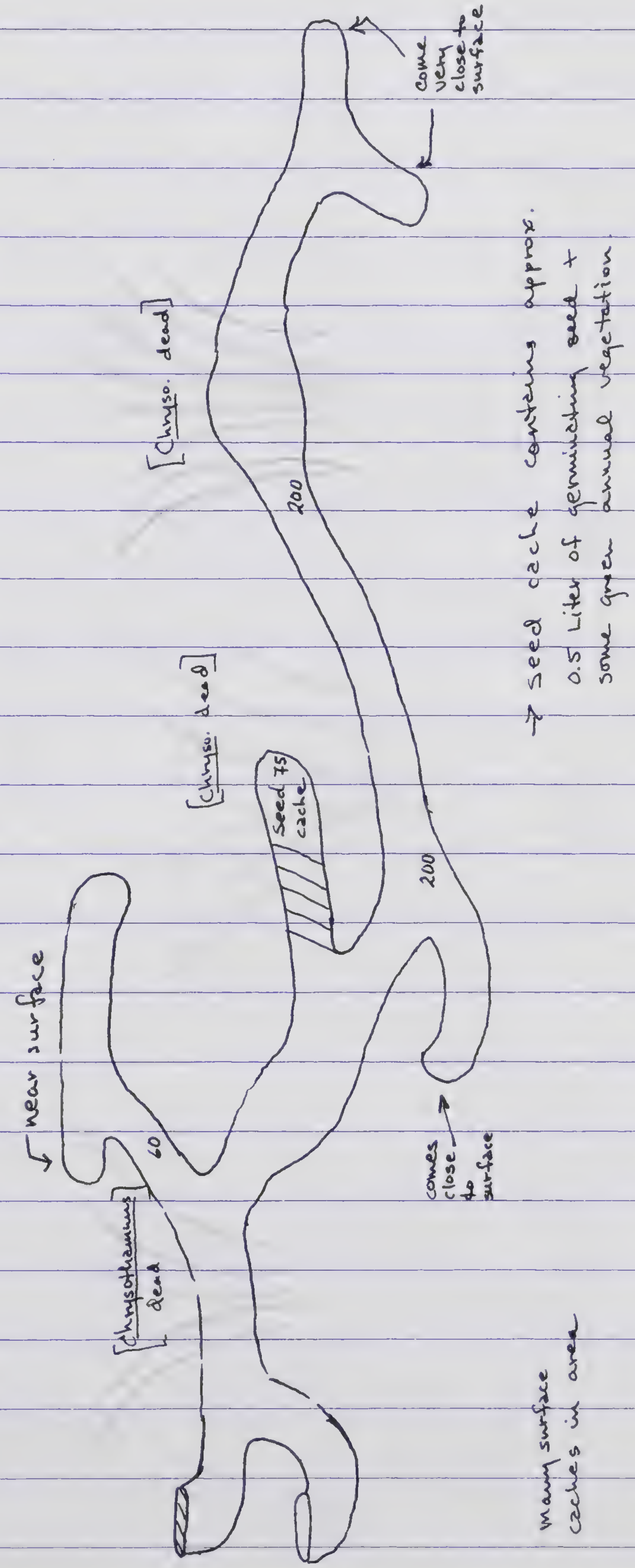
Hafner, M.S.
1975

Sand Canyon, 0.4 mi. N. of Hwy 58, 2.9 mi. E X S of Monolith, Kern Co. California 3949 ft. [T32S, R34E, NW 1/4 sec 27]

26 January

D. panamintinus ♀ [vag. plug 58 gm.]

[located on bank of irrigation ditch.]



Journal

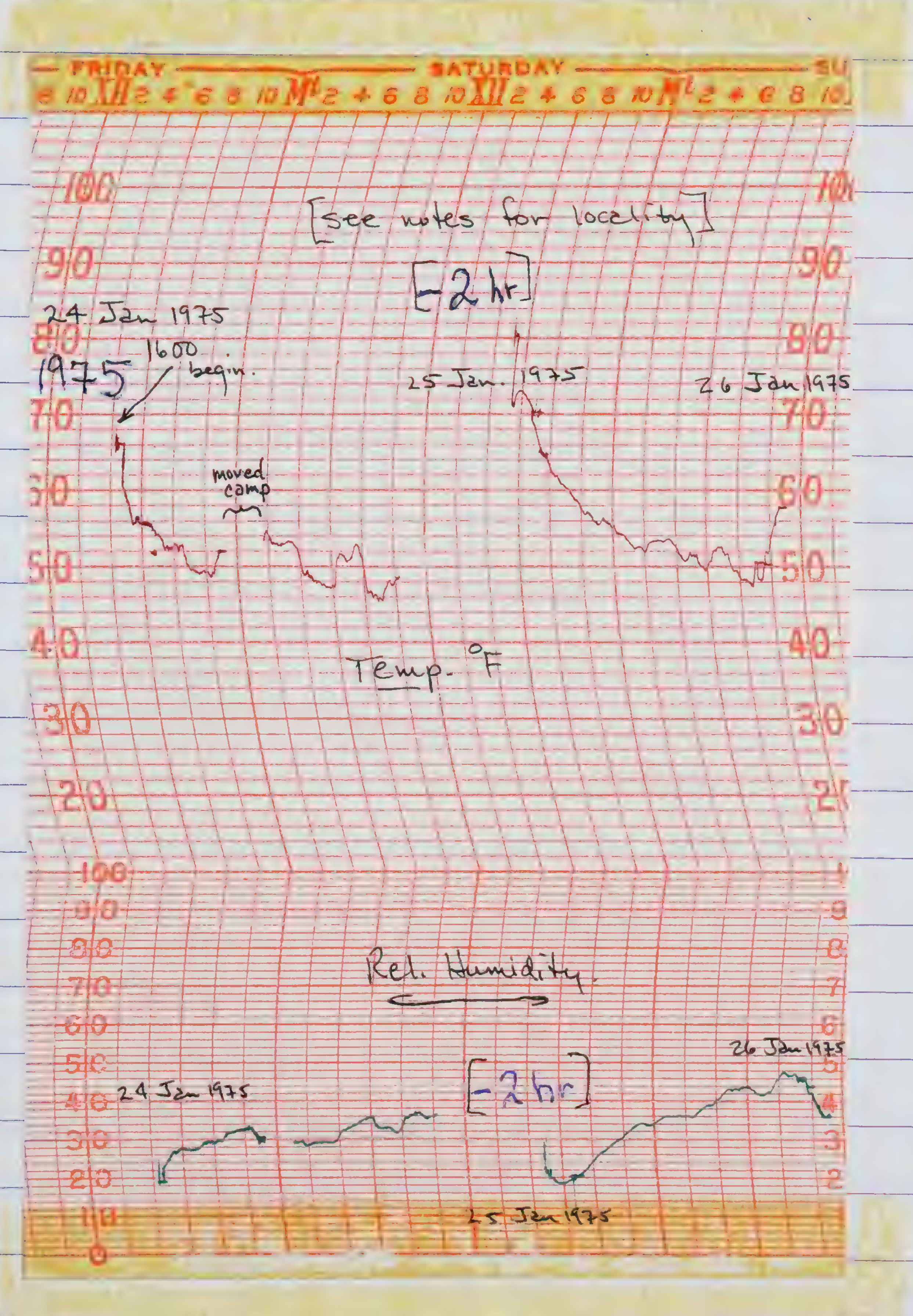
Hafner, M.S.
1975

Sand canyon, 0.4 mi. N of Hwy 58, 2.9 mi E x S of Monolith, Kern Co., California 3949 ft. [T32S, R34E, NW¼ sec 27]

26 January (con't)

contained a small seed cache (~.5 liter). We returned all *Dipodomys* captured this trip to the laboratory for study.

→ Weather data for this trip: [Con't on next page]



# Journal

Hafner, M.S.
1975

Sand Canyon, 0.4 mi N of Hwy 58, 2.9 mi E x S Monolith, Kern Co. 3949 ft. California [T32R, R34E, NW 1/4 sec 27]

26 January [con't] While at sand canyon, a man drove-up in a white pick-up and asked what we were "up to". It turns out that he knows Dick Frisan(sp?) at the L.A. Co. Museum and Dick has been trapping on this guy's property for the last several months. He gave us his card and asked us to clear it with him before we trapped again. He said Frisan is trapping all up & down Sand Canyon – I can't see why. The guy also said that there are loads of Indian burial sites along the canyon, but that he hides them so that people won't bother them (or him).

JOHN D. "JACK" COYNE
ELECTRICIAN
P.O. BOX 361
TEHACHAPI, CALIFORNIA 93561
822-3307

# Journal

Hayner, M.S.
1975

2 mi. E. Searles Station, 9 mi. NNE of Johannesburg, San Bernardino Co. California 3200 ft. (Camp 1)

21 February Darcey, Barron, John Wells and I left L.A. at 1830 and arrived at this location ~2100. [We used the school van.] There was a 3/4 moon. Temp. approximately 30°F with a moderate NE'ly wind. We set out 194 live traps in 4 lines east of camp. The wind died down through the night.

22 February 2 mi E. Searles Station, 9 mi NNE of Johannesburg, San Bernardino Co., 3200 ft. California
Sunrise approximately 06:30 - very gentle SE'ly breeze, ~32°F. I arose 0700 and John and Darcey arose an hour later. We checked traps, but left them out in hopes of catching Ammospermophilus for Dave's project.

Trapping Results:

3 Ammospermophilus leucurus
7 Perognathus formosus [1 died of cold]
3 ~~2~~ Onychomys torridus [1 dead]
9 Dipodomys panamintinus [5♂, 4♀]
7 Dipodomys merriami [5♂, 2♀]

Success = 29/194 = 15%

Journal

Haynie, M.S.
1975

2 mi. E. Searles Station, 9 mi. NNE of Johannesburg, San Bernardino Co., 3200 ft. California

22 February [con't] I marked the exact bush where I caught each Dipodomys so that I could excavate a few Burrows. John and I didn't have much luck at digging the burrows out but I got one questionable D.p. ♂ burrow system and 1 very good Dm ♀ system. I say "questionable" because I never found any nest material and what I excavated could have been an old system or a "duck-in" system. BURROW MAPS ON FOLLOWING PAGES. There was much evidence of surface seed caching in the vicinity of burrow systems. There were numerous small annuals sprouting everywhere. We saw several small lizards. [sceloporus?] I found a small astragilus bone (Squirrel ?) inside the nest of D.m. ♀ above.

We picked up traps ~1100 and drove into Randsburg to buy ice & beer. We then continued on to Boron Camp. The day was very nice. Temperature ~70°F, very light NE'ly breeze. High clouds. At Boron Camp, we walked for an

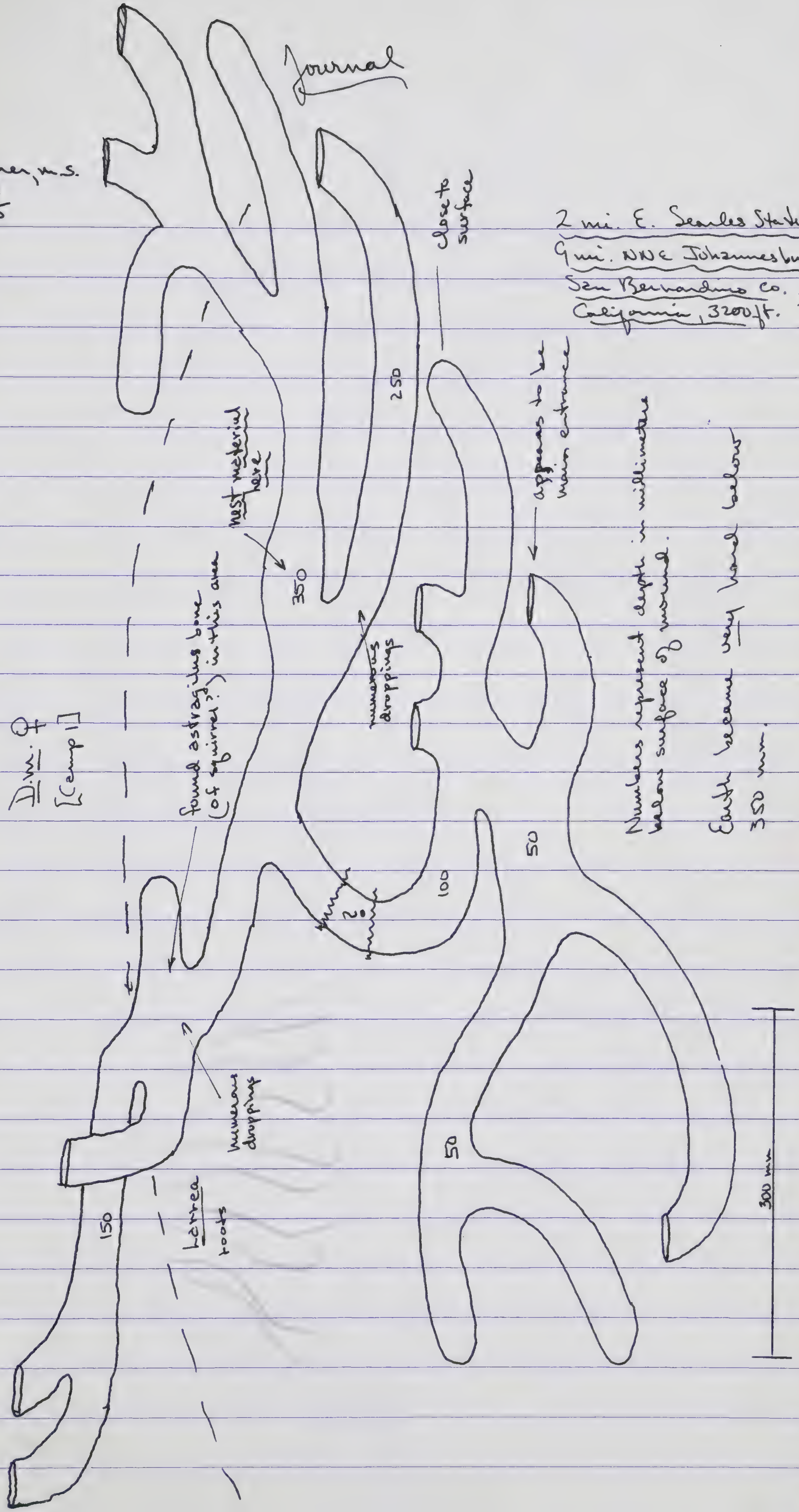
Journal

Hafner, M.S.
1975

22 February

2 mi. E. Searles Station,
9 mi. NNE Johannesburg,
San Bernardino Co.,
California, 3200 ft.

D. m. ♀ [Camp 1]




Numbers represent depth in millimetre below surface of mound.

Earth became very hard below 350 mm.

22 February

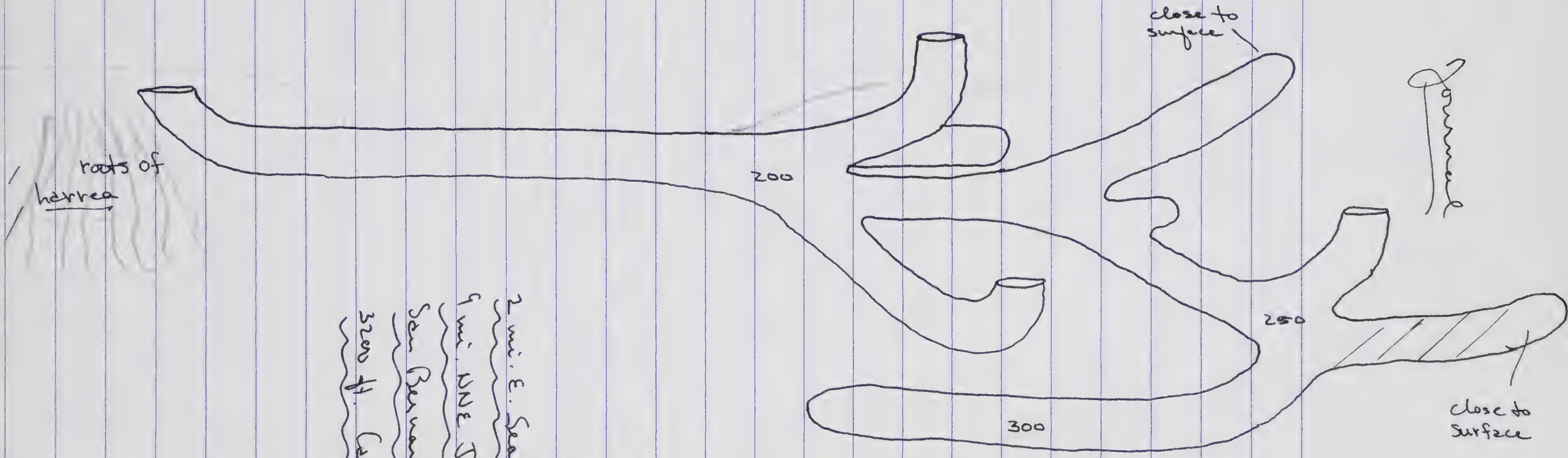
Hafner, M.S.
1975

Journal

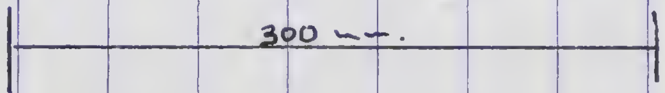
Dipodomys panamintinus ♂

"Camp 1"

Questionable, because no nest material found.




Numbers represent depth in mm. below surface of ground.



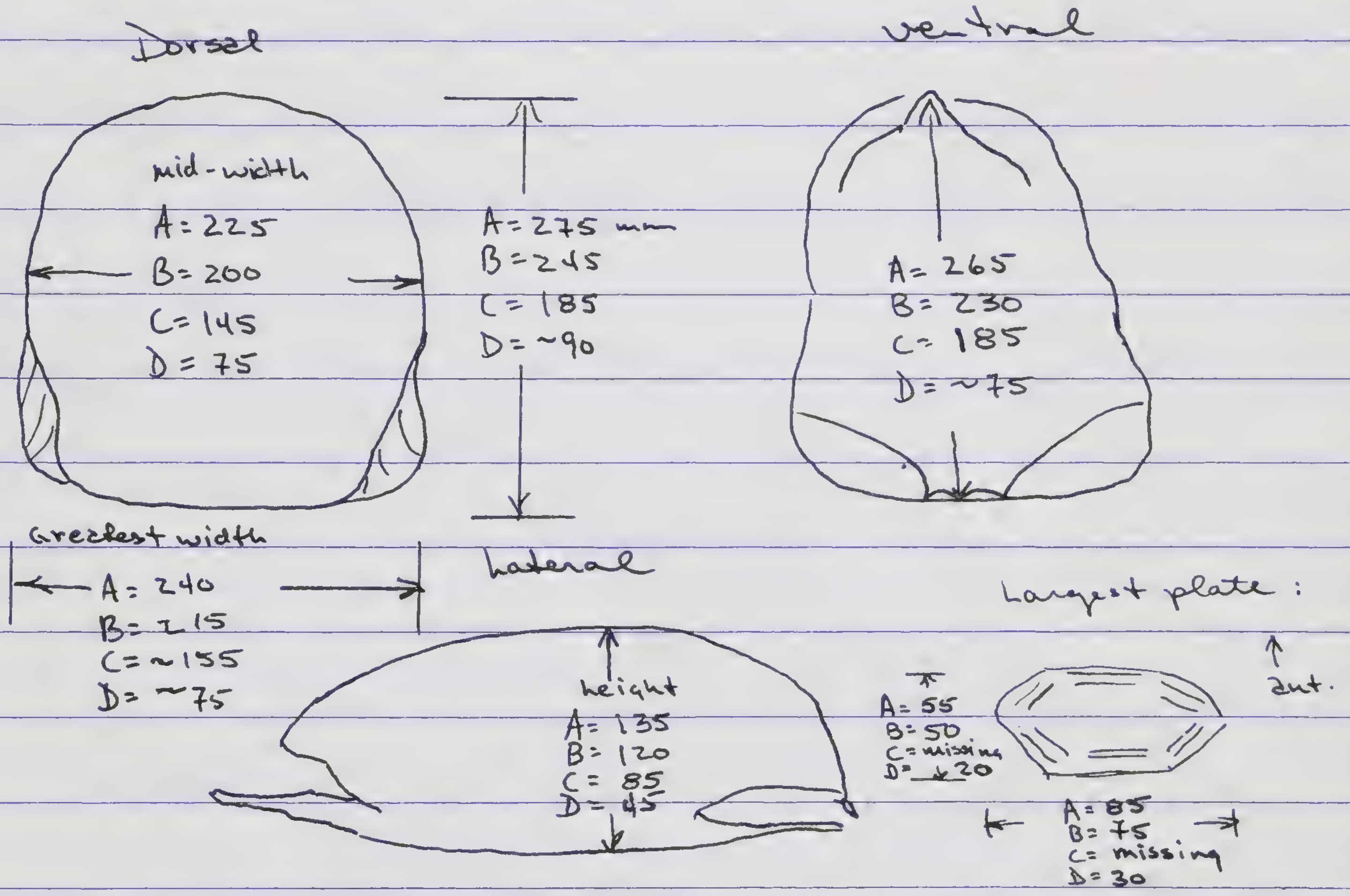

2 mi. E. Searles Station,
9 mi. NNE Johannesburg,
San Bernardino Co.,
3200 ft. California.

Journal

Hafner, M.S.
1975

11.8 mi. E. of Boron, San Bernardino Co. 2500 ft., California.

22 February [con't] hours or so, finding 4 tortoise shells of varying sizes. I measured the shells for Barry's project:




A= Ad. ♂ , plates falling off - (old)
B = Ad. ♂ , not too long dead (part of skel. intact)
C=SubAd. ♀ , old shell, left rear 1/4 missing.
D= juv. ♀(?), very small shell, dorsal 1/3 missing.

As the measurements show one tortoise shell was that of a juvenile - this is the smallest shell we've found to date. 1700 - We set 194 live + 100 snap traps in the vicinity of camp. The wind picked-up around sunset and the temp-

# Journal

Hofman, M.S.
1975

11.8 mi. E. Boron, San Bernardino Co. 2500 ft.
California

22 February [con't] eratures cooled quickly. All temperature and Relative Humidity data for this trip are on following page. The night was quite cold with a very light breeze from the N.W.

23 February 11.8 mi. E. Boron, San Bernardino Co. 2500 ft.
California

0700 - arose and checked traps with following results:

Live: 5 Dipodomys merriami [3 ♂, 2 ♀]

Snap: 1 Dipodomys merriami MSH 82 ♂

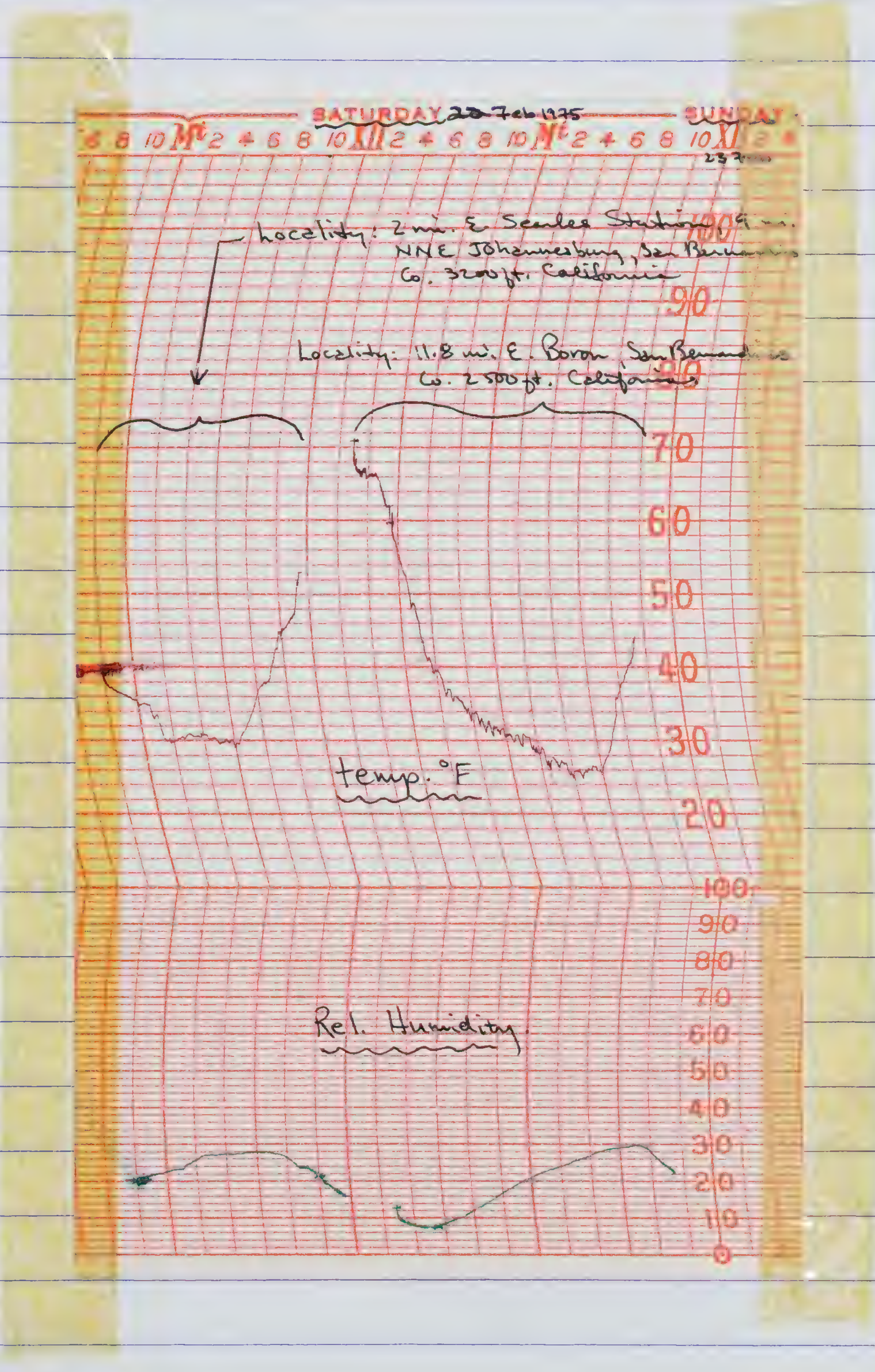
Success = 6/294 ≑ 2%

We noted much evidence of a Kit Fox having "checked our traps" for us during the night. ie, Droppings, tracks, urination. 1030 we broke camp and headed for L.A. The weather was beautiful, clear, sunny.

# Journal

Hafner, M.S.
1975

## Weather Data for trip of 21-23 February 1975



# Journal

Hafner, M.S.
1975

Vicinity of Mojave and Boron, California.

18 March. Roland Leong and I left L.A. at 0700 heading towards Mojave. We arrived at my trapping locality ~3 mi. N. of Mojave at 0830. We proceeded to measure vegetation spacing and density as per the following method: a string 25 meters long was stretched in the N, S, E, and W directions from a randomly chosen central location. Each plant (perennial (sp.?)) that touched the string was measured and identified. We used greatest overall breadth of the plant - and this was multiplied by our "density factor". ie, the percentage of a 3x5" index card that was NOT visible when the card was held behind the ~~sch~~ shrub. We took several measurements of each shrub, then averaged them together to get average density. [100% would be very dense, 10% would be very sparce].

1000 - We headed towards Sand Canyon locality where we took more vegetation samples and measurements. Soil samples were taken at the end of each 25 meter line (4 for each locality). There were patches of snow ~~on~~ the ground at the Sand Canyon locality ~ Clear day, cold, slight w'ly breeze.

Journal

Hafner, M.S.
1975

Vicinity of Mojave, Kern County, California

18 March [con't] 1030 - We proceeded to Camp 1 where vegetation and soil data were collected. By this hour, the sun was very warm and birds (especially *Amphispiza bilineata*) were very active.

1130 - We drove to Camp 2. On our way along the dirt road we met the old man whom I had talked to last year (he lives at the old shack near camp 2). The man said that they had not yet received their normal amounts of rainfall for the winter. He said to make ourselves at home at his shack, but of course we just drove through. We collected vegetation & soil data then left.

1300 - We drove to Boron locality (13.5 mi East of Boron where we collected vegetation and soil data then proceeded home.

This trip was very helpful in that I gathered data from 5 of 6 localities in this area. (The locality E. of Barstow) will be visited another time.

We arrived L.A approximately 1800.

I immediately prepared for the next trip.

Hafner, M.S.
1975

Journal

Albuquerque, Bernalillo Co. New Mexico.

19 March I left L.A [with the school van] at 0300 this morning and drove East with good weather and (light) good traffic - arrived Albuquerque 1700 Rocky Mt. time. I took 3 Ammospermophilus l. leucurus to Dave (alive) so we went to U.N.M. and put them in cages. We just relaxed all evening. John will meet us here tomorrow and we head N. West on Friday.

20 March Albuquerque, Bernalillo Co. New Mexico.

0800, arose and wrote-up field notes. We then went up to U.N.M. Sat in on a lower division Bio lecture by Dr. Altenbach, had lunch the went to a Grad. Student seminar with Dave and Diane. Dr. James Findley was the coordinator of the group (~8 students) and we had an interesting discussion of general mammal biogeography and particularly the zoogeography of the Histricomorph — Caviomorph groups. Diane & I looked over the campus while Dave instructed a lab group of freshmen bio majors.

1800 - John arrived from Texas and

# Journal

Hofner, M.S.
1975

Albuquerque, Bernalillo Co., New Mexico

20 March (con't) We finished preparing our field equipment, loaded the van, and finally got to bed ~2300.

21 March Albuquerque, Bernalillo Co., New Mexico

0300 - arose and departed Albuquerque heading West on US. 40 (Mileage 70730.2) then north through Shiprock, N.M. to the S.W. corner of Colorado. Rain and occasional snow most of the way. There were numerous, beautiful rocky buttes in the NW. corner of New Mexico. These buttes arose very suddenly from the otherwise flat land.

0900 - 5 mi. N. La Sal Junction, Utah

J.C. Hofner collected road kill of Flammulated Owl - skull only.

We headed north, west toward Provo, Utah.

1400 - 15 mi. S.E. Provo, Utah - sighted 2 adult Bald Eagles and several road kill deer near US 6-50. Several sightings of Ferruginous Hawks, Rough-legged Hawks, and Marsh Hawks throughout Utah this day.

1415 - Arrived Provo, Utah, picked up supplies and J.C.H. called Paul Adams

# Journal

Hafner, M.S.
1975

21 March [con't] Vicinity of Provo, Utah

Dugway Proving Grounds (P. Adams is in charge of monitering the plant & animal life of the Proving Grounds) J.C.H. had asked P.A. to obtain several specimens of Microdipodops for him, but the trapping group had not yet returned. The weather looked ominous, but we decided to trap for ourselves anyway and we headed from Provo west on Interstate 73. We took the old Pony-Express-Stage Route (dirt road).

1600 - 8 mi. NE Vernon, Utah - We collected a road-kill Red-tailed Hawk [Ad.] the bird had been eating a kill on the road just before being hit. We continued over Lookout Pass to 10 mi SW Simpson Springs actual locality: 25 mi SW Dugway, Utah, Tooele Co. The sky was partly cloudy, cold, no snow on ground. Along the road, we sighted several Cottontails (Sylvilagus), a pair of Adult Red-tailed Hawks and much evidence of Badger (Taxidea) work.

1800 - Made camp and set out only 200 traps (100 each side of road) along a

Journal

Hafner, M. S.
1975

Vicinity of 25 mi. SW Dugway, Tooele Co., Utah

21 March [con't] ridge of brush-covered sand dunes. The dominant plants appeared to be *Chrysothamnus* sp. and *Atriplex* sp. –

Vicinity of 25 mi SW Dugway, Tooele Co Utah

22 March Woke up ~0530 to a blizzard of heavy snowfall driven by a strong wind. (NW) Tent was mostly covered and ~4 in. had fallen. We broke camp, picked up as much gear as we could and tried to drive to safety. We couldn't get out of the valley in East or West directions so we returned to camp area (sun was now up) in an attempt to retrieve our traps. The traps were buried in snow drifts up to 18", so it took hours to find them all. (we lost ~20 traps).

Trapping Results:

26 *Dipodomys ordii*

1 *Peromyscus maniculatus*

27/200 = 13.5 % Success

The *D. ordii* were fairly heavily parasitized with ticks.

1000 – Sky mostly clear now. We drove via Dugway to Utah hwy 36. Along hwy 36 we sighted several *Ammospermophilus*, a few

Journal

Hafner, M.S.
1975

Vicinity SW of Provo. Utah.

22 March [con't] Rough-legged Hawks, Marsh Hawks, and one Golden Eagle. We gassed-up the Van in Eureka, Utah. The weather was mostly overcast with high NW'ly winds and blowing snow.

1400 - Ate lunch in Delta, Utah, then continued W. on U.S. 6-50. We turned south just before the Utah-Nevada border and stopped in Garrison, Utah. Procured lodging, groceries and information at the general store in Garrison then went 10 mi. S. on Hwy 21, turned SW on a dirt road ~2 mi. to the trapping locality. 12 mi. S. Garrison, Millard Co., Utah.

1800 - set out 200 traps in Chrysothamnus, Artemisia tridentata community. (2 lines of 100 - E of dirt road.) We noted numerous Badger (Taxidea) diggings in area - one very fresh hole had fleas hopping on the fresh earth nearby. 1930 - began to snow lightly - we finished setting traps and returned to cabin in Garrison.

23 March 12 Mi. S. Garrison, Millard Co. Utah.

0800 - Arose and checked traps with following results:

Journal

Hafner, M.S.
1975

12 mi. S. Garrison, Millard Co., Utah

23 March [con't] results: 8 *Peromyscus maniculatus*
1 *Onychomys leucogaster* (very large)
1 *Dipodomys microps*

Success = 10/200 = 5%

Clear, Calm, Cold day. J.C. and D.J. collected Adult and juv. Coyote (*Canis latrans*) skulls from skins hung on fences nearby trapping locality. We stopped at a large, old cabin to look for bats. Noted Great Horned owl and collected pellets nearby house. Saw Several Flickers (*Colaptes*) and Magpies in area. Also, one Red-tailed Hawk across road from Cabin. The old log cabin was partially wall-papered with old newspaper dating back to 1892-3. Upon return to Garrison sighted several Ducks (sp?) in small lake. (Pruess Lake). *Ammospermophilus* along road.

1100 - Packed-up and drove NW on Hwy 73 to Baker, Nevada. Had very nice breakfast near an old stone chimney then got back on US 6-50 and turned south on U.S. 93. Drove by Panaca to Caliente, Nevada - got gas and continued westerly,

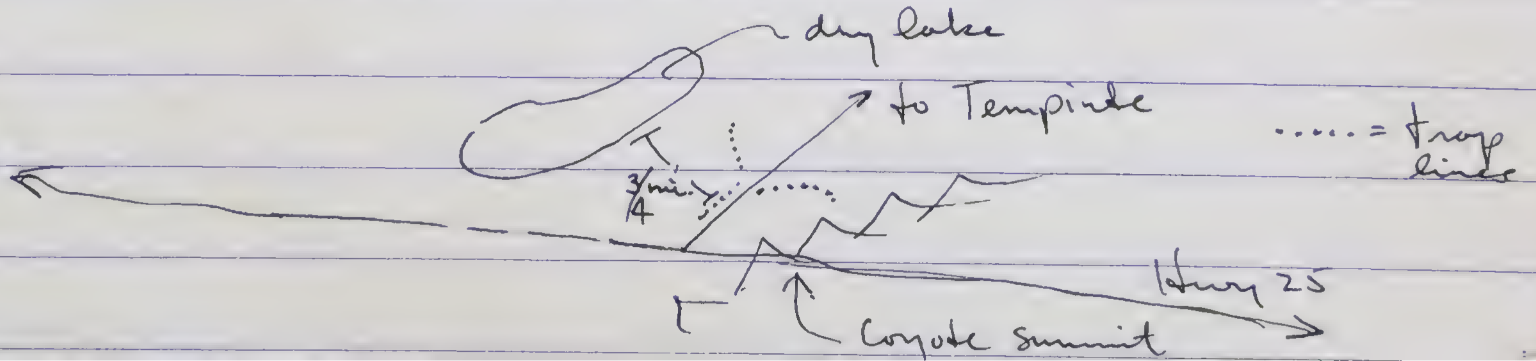
Journal

Hafner, M.S.
1975

Vicinity of Caliente, Lincoln Co., Nevada.

23 March [con't] on U.S. 93 to Dry Lake Valley, 21 mi. W. Panaca, Lincoln Co. Nevada. Set 200 traps near Corral & chute on W. side of Northernmost Dry Lake. Mostly low Atriplex and dry (fine) sand. Returned to Hwy 93 and Proceeded W. to Hiko, Nevada. At intersection of Nev. Hwy 25 and 38 shot Beechey Ground Squirrel (Spermophilus (~~beechii?~~ variagatus?) - (actually 4 mi. South Hiko.).

1500 - Proceeded North on 38 to 1 mi. South Hiko where we shot a Road-Runner (Geococcyx) from road. Sighted a second Road-Runner. Noted several Sylvilagus and Ammospermophilus alongside road. Returned to Hwy 25 and drove W. to just beyond (W.) Coyote Summit. We then turned N. on dirt road toward Tempiute, Nevada. Stopped approximately 1 mi. N. of Hwy 25 and made camp where we set 300 traps in 3 lines as follows:



Journal

Hafner, M.S.
1975

Vicinity, 30 mi. N.W Hiko, Lincoln Co. 4750' Nevada

23 March [con't] We also set one set of 4 Gopher traps near camp. Atriplex and Grayea community — fine sand on N.Westernmost set and loose gravel on other sets. Full moon, calm, cold night. (No beer!).

24 March Vicinity, 30 mi. N.W. Hiko, Lincoln Co. 4750' Nevada

0800 Arose and checked traps.

Results: 1 Thomomys bottae
1 D. ordii

2/300 = ~2% success.

0930 picked-up camp and drove to Dry Lake Valley (other trap set). Along Hwy 93 in Dry Lake Valley noted Adult Golden Eagle on telephone Pole 50 meters from road. On dirt road to trapping locality we stopped and hunted for ~45 min for Sylvilagus in rocks near road. (no success). We set 4 gopher traps to be checked on way out. Large rocky outcropping W. of dirt road had what appeared to be a Prairie Falcon nest in crevice. (Couldn't quite reach nest, but sighted Prairie Falcon in rough vicinity (actually several miles away). Sighted Sylvilagus, collected Uta stansburiana, and noted much evidence

Journal

Hafner, M.S.
1975

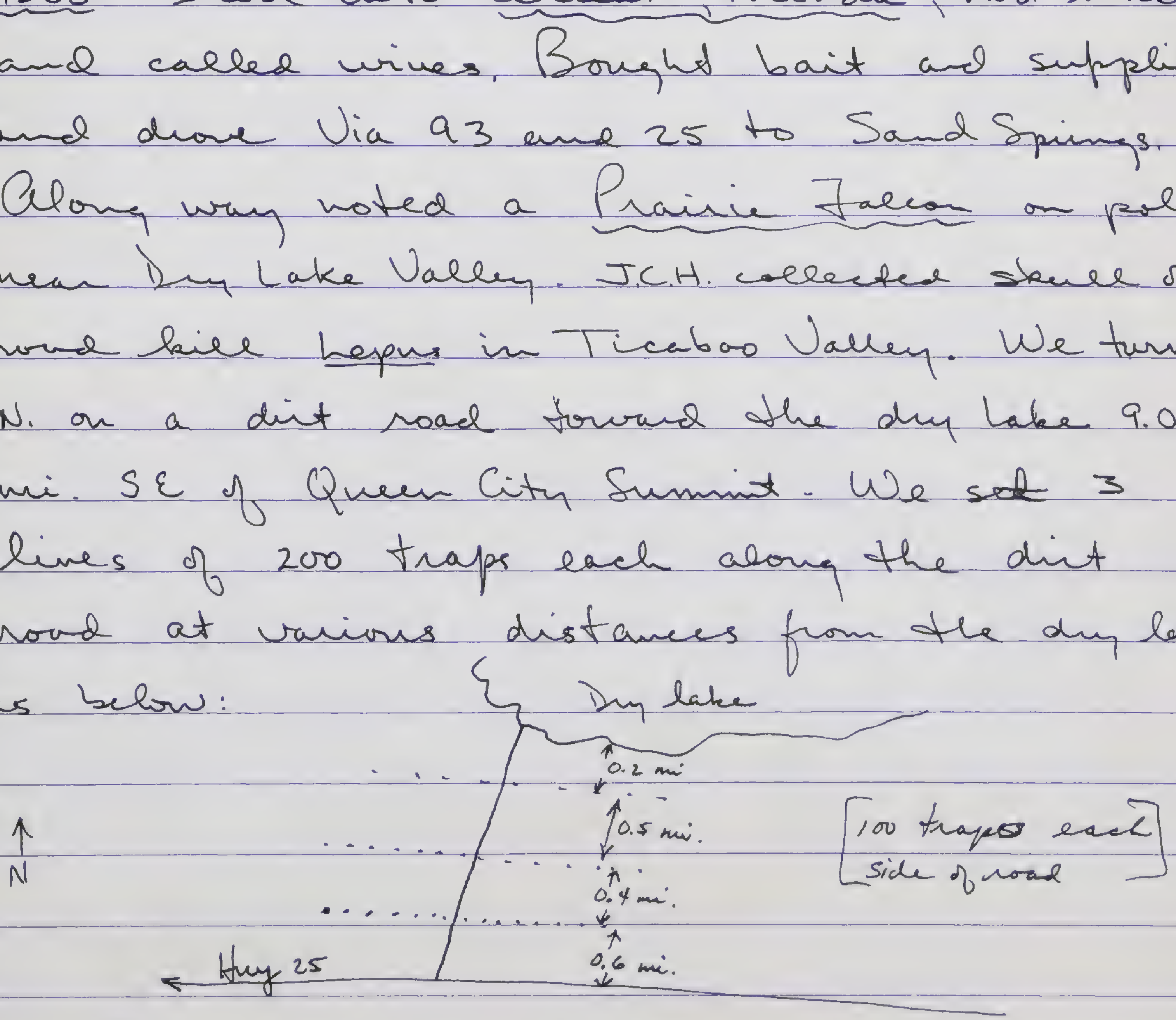
Dry Lake Valley, 21 mi W. Panaca, Lincoln Co., Nev.

24 March (con't) of Neotoma in rocks. Checked traps with following results: 2 Microdipodops pallidus
1 Peromyscus maniculatus
1 Dipodomys microps

(Karyotyping in the lab. showed the Microdipodops to be M. pallidus rather than M. megacephalus, as we originally believed).

Success = 4/200 = 2%

1300 - Drove into Caliente, Nevada, had lunch and called wives, Bought bait and supplies and drove via 93 and 25 to Sand Springs. Along way noted a Prairie Falcon on pole near Dry Lake Valley. J.C.H. collected skull of road kill Lepus in Ticaboo Valley. We turned N. on a dirt road toward the dry lake 9.0 mi. SE of Queen City Summit. We ~~set~~ 3 lines of 200 traps each along the dirt road at various distances from the dry lake as below:




The southernmost set was in course

# Journal

Hafner, M.S.
1975

31 mi. N.W. Hiko, near dry lake, Lincoln Co. Nev.

24 March [con't] compact soil with low vegetation. The soil became finer and looser as we neared the dry lake. The vegetation was progressively taller nearer to the dry lake. Set 1 set of 2 gopher traps approximately .2 mi. N of Hwy 25 on dirt road.

1930 - returned to Hwy 25 and drove to a point W. of Queen City Summit; took dirt road N about .5 mi. and camped amidst rocks. Heavy cloud cover, full moon, windy (SE) and cold.

25 March 31 mi. N.W. Hiko, near dry lake, Lincoln Co., Nevada

0730 awoke to a light sprinkle of rain. Drove to dry lake to check traps. Caught nothing in Gopher traps.

Results: 32 *Microdipodops* sp.
4 *Peromyscus maniculatus*
2 *Perognathus longimembris*
1 *Dipodomys ordii*
1 *Dipodomys microps*
4 *Onychomys* (*torridus*)

Success = $44/600 = 7\%$

John noted the soil type, vegetation

# Journal

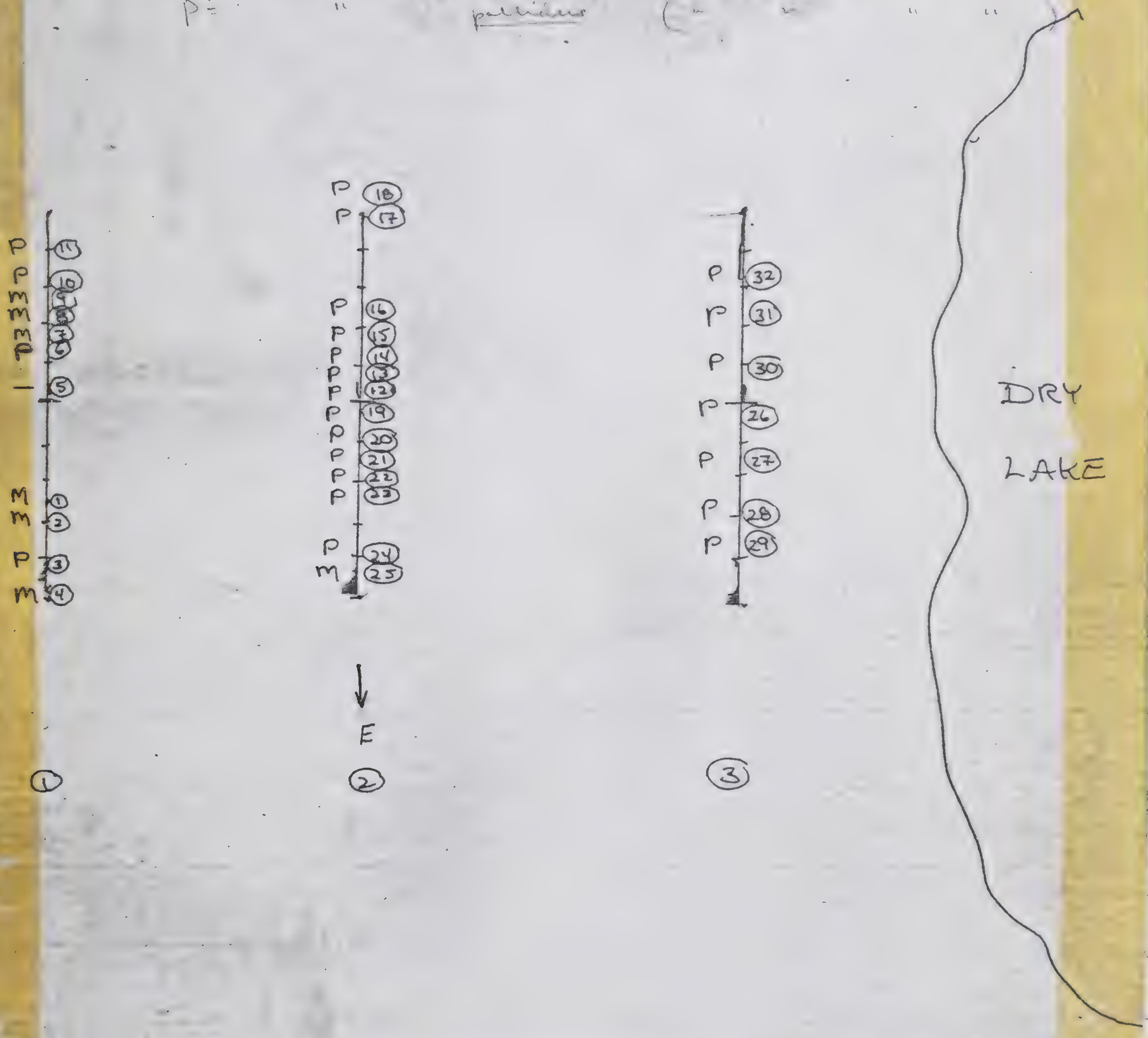
Hafner, M.S.
1975

31 mi. N.W. Hiko, near dry lake, Lincoln Co., Nevada.

25 March [con't] Map of captures:

[Copy of map made by D.J. Hafner]

M = microdipodops megacephalus (as determined by karyotype)
P = " pallidus ( " " " " )



# Journal

Hafner, M.S.
1975

31 mi. NW. Hiko, near dry lake, Lincoln Co., Nevada

25 March [con't] spacing, etc. where each Microdipodops was captured. Most Micro's captured in the southern-most line (furthest from the lake) had the dark-tipped tail of M. megacephalus, and most specimens caught near the lake (in the fine sand) had light-tipped tails of M. pallidus. E.R. Hall had found hybrids here years ago, so J.C.H. was hoping to do karyotypic analysis of these (hybrids?).

A heavy hail and rain storm moved in while we checked traps making it rather cold and uncomfortable.

1200 - returned to camp in hills to find approximately 4" of snow covering camp. We couldn't drive the van along the steep road, so we hiked in to the camp and carried out our gear. [The "parking gear" on the van went out at this point].

We drove west on hwy 25, and ate breakfast in Warm Springs. Occasional hail showers fell all afternoon.

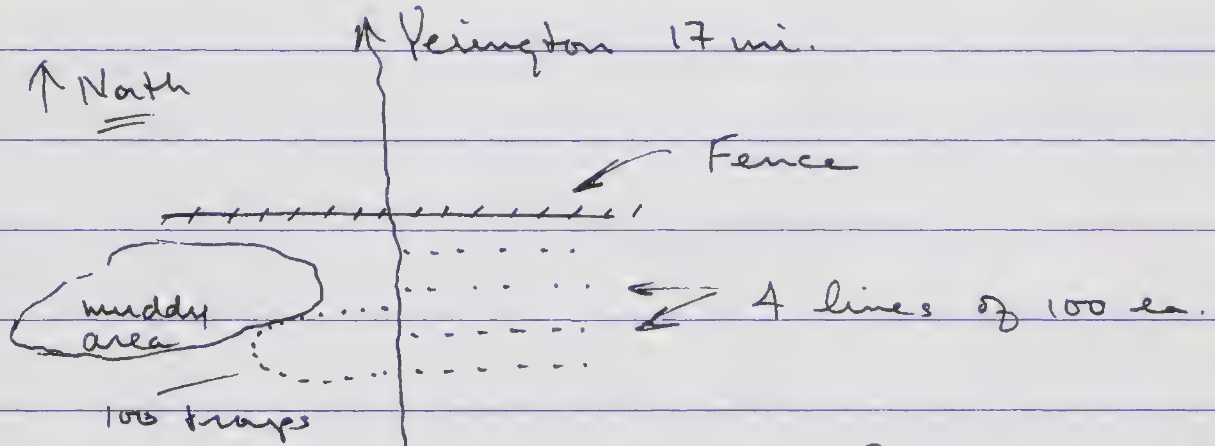
1300 - Continued West on Hwy 6 through Tonopah, Nevada - snowing quite heavily there. Turned N. on hwy 95 through

Journal

Hafner, M.S.
1975

Various localities in S.W. and W. Nevada.

25 March (con't) Hawthorn, Nevada (bought supplies). Snowfall on and off all day. Drove N. to Yerington, Nevada (alt. hwy 95 West) and headed S. to trapping locality 17 mi S, 5 mi. E. Yerington, Lyon Co. Nevada. Set out ~400 traps in 5 lines, 4 on E side of dirt road and 1 on west:




Trap lines set in Eurotia, Grayia community, fine sand — somewhat moist. D.J.H. set 4 Gopher traps in one complex. Wind was very strong from NE, and it began to snow as we finished setting. 2000 - drove into Yerington and got a motel room ($10.50). Drank some beer, showered, & crashed.

26 March 17 mi. S, 5 mi. E Yerington, Lyon Co., 5000' Nevada

0800 arose. Battery on Van was dead (17°F), so we ate breakfast, then got a man to "jump the battery" - We made arrangements to get a new battery upon our

Journal

Hafner, M.S.
1975

17 mi. S, 5 mi E. Yerington, Lyon Co. 5000', Nevada

26 March [con't] return to town later in the morning. We then drove to the trapping locality.

Results: 1 Thomomys bottae

1 Dipodomys ordii

2 D. merriami

4/400 = 1% success

(most traps were ½ full of snow)

We picked-up only the 100 traps from the west side of the road (poor habitat) and re-set remaining traps.

1100 - drove N. on Alt. Hwy 95 after getting new battery in Yerington. S. of Fernley, Nevada noted Kit Fox cross road. At Wadsworth, Nevada took Hwy 34 North and drove to 7.5 mi. (by road) N. Nixon, Washoe Co., Nevada where we set 100 traps on a sloping sand dune habitat. Sparse vegetation. We then returned to Nixon and took hwy 33 west to locality 5 mi. SW. Sutcliffe, Washoe Co. Nevada. At this locality we set the remaining 100 traps S. of the Highway in a sandy, Artemisia tridentata community. Soil was somewhat moist and wet in areas. Drove back thru Wadsworth and got a motel room in

Journal

Hafner, M.S.
1975

Various locales N. of Wadsworth, Washoe Co, Nevada.

26 March [con't] Fernley (#12). We killed and froze several specimens and transfered all Microdipodops to jars for live return to lab. We then took these remaining traps (~100) and drove to a locality 1.5 mi. N. of Wadsworth where we set the traps in 1 line E of hwy. Fine sand, moderately sparce vegetation. We noted Sylvilagus, Coyote (Canis) and Dipodomys prints in the fine sand.

1930 - Returned to motel. Slight snow during night.

27 March 1.5 mi. North Wadsworth, Washoe Co. Nevada.

0830 awoke and drove to this locality. Checked traps with following results:

7 Microdipodops sp. (1 torpid)

7/100 = 7% success

[These were believed to be M. megacephalus ambiguous but I believe were shown by JCH to be M. pallidus ?]

We drove to the next trapping locality

7.5 mi. By road N. Nixon, Washoe Co., Nevada.

Results: 1 Microdipodops sp.

1/100 = 1% success.

Drove to locality W of Pyramid Lake:

5 mi. S W. Sutcliffe, Washoe Co. Nevada.

Journal

Hafner, M.S.
1975

5 mi. SW. Sutcliffe, Washoe Co., Nevada.

27 March [con't] Results: 2 *Dipodomys* sp.

1 *Peromyscus maniculatus*

3/100 = 3% success.

1230 checked out of motel in Fernley and drove S. to locality S. Yerington.

17 mi S. 5 mi. E. Yerington, Lyon Co. 5000', Nevada.

Results: 2 *Dipodomys* sp.

3 *M. pallidus* (1 dead)

No snow had fallen at this locality, but the night was apparently very cold. A cold wind blew while we checked traps.

1500 left Yerington S. on Hwy 3 to Hwy 22. Then SW to Bridgeport, California, where we ate lunch. Due to the unusual amount of snow, we decided to attempt one night of trapping in the Mojave Desert. We drove south on U.S. 395, but it was snowing near Johannesburg, California, so we continued driving all night and arrived in Albuquerque ~10:00 Hr 28 March.

28 March Albuquerque, San Beralillo Co., New Mexico.

I left here at 10:30 and drove W on US.66 arriving L.A. 11:30 Pacific time. A long, cold, not too successful venture. Mileage at Albuquerque = 73750.9

# Journal

Hafner, M.S.
1975

5 mi. E. California City, Kern Co., 2500', California

4 April 1700 Darcey, Baron and I left L.A. and arrived at this locality at dusk. Darcey wasn't feeling too well (expecting in November) so I set out 200 traps in 4 lines from camp in Larrea, Atriplex, Chrysothamnus community. There were many yellow annuals blooming forming a low, yellow carpet. The night was cold and windy. I noted 1 call of an Onychomys while setting traps (~1930).

5 April 5 mi. E. California City, Kern Co., 2500', California.
0830 - wind died down - I checked traps with following results:

23 *Perognathus formosus*
5 *Onychomys torridus*
9 *Dipodomys merriami*
3 *Dipodomys panamintinus*
8 *Perognathus longimembris*

48/200 = 24% success

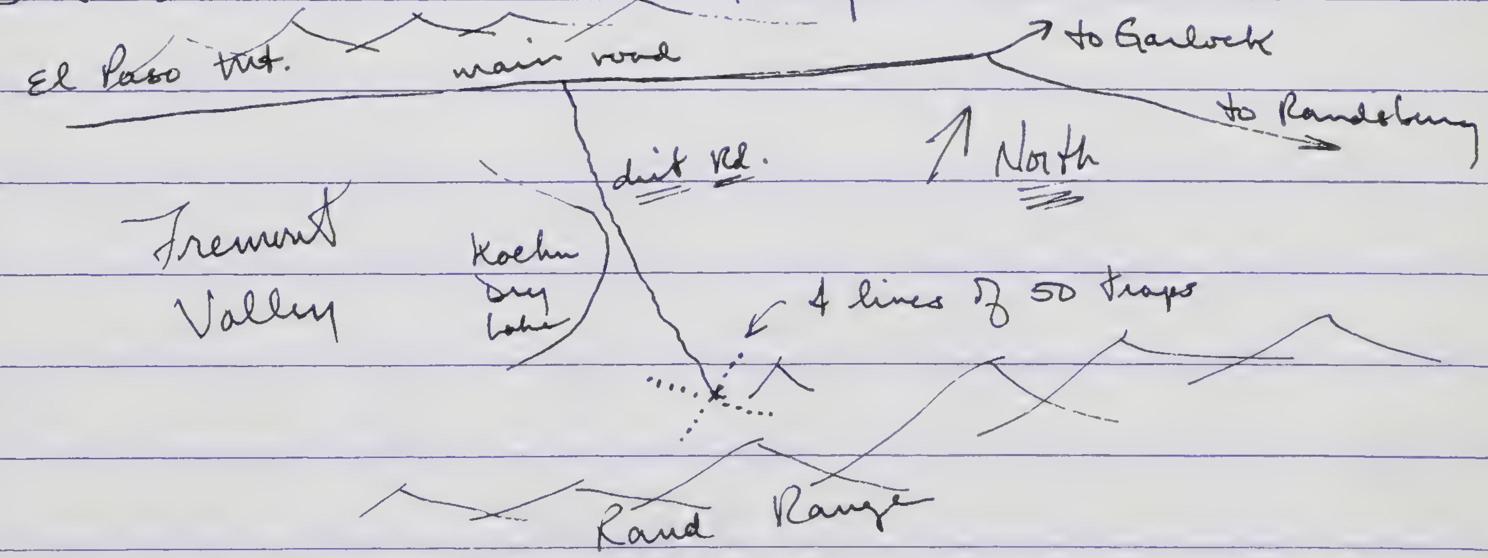
I was surprised not to catch any Peromyscus. Clouds moved in ~0930 and a light rain fell. We decided to head home as trapping would not be too good after a rain. 1200 - headed for L. Angeles.

# Journal

Hafner, M.S.
1975

2.6 mi. S, 6.3 mi. W Randsburg, Kern Co. 2900' California

8 April. Rollin Leong and I left L.A. ~1400 and arrived this locality 1730. We used the school Van. While crossing through Fremont Valley, (by Koehn Lake) noticed patches of wildflowers and a small area of Desert Holly (*Atriplex hymenelytra*). We drove over a dirt road and camped near a small hill on the gently sloping S side of Fremont Valley. Mixed *Atriplex*, *Larrea*, *Dalea* community; fine to course gravel. Numerous birds were seen and heard, Horned Larks and Desert Sparrows most abundant. We set out 200 live traps as below:




The sky was partly cloudy, cool temperatures, soft breeze. We measured vegetation density and gathered soil samples. Occasional sprinkles until 2000, at which time sky cleared and remained so over night.

Hafner, M.S. Journal
1978

2.6 mi. S, 6.3 mi. West Randsburg, Kern Co. 2900' California

9 April 0640 – arose and checked traps. Sky clear, light breeze. ~ 45° F.

Results: 9 *Perognathus formosus*
6 *Perognathus longimembris*
11 *Dipodomys merriami*

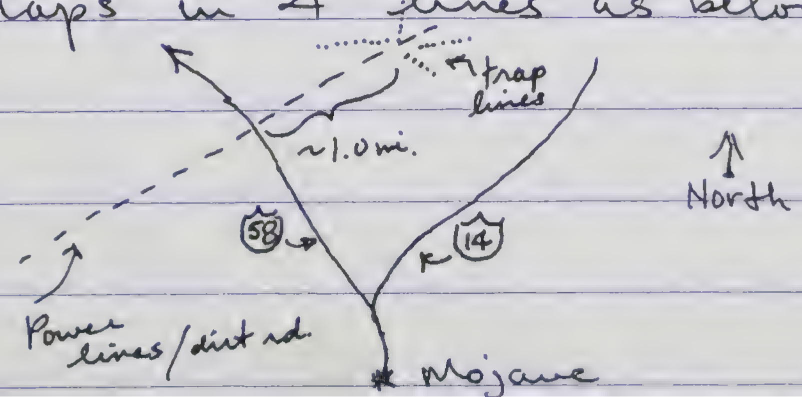
Success = 26/200 = 13%

A kit Fox had apparently raided nearly all of the wooden traps and removed their contents; (so these traps will not be considered in my data analysis for rodent density). Many droppings were found atop several box-traps.

0900 – We gathered all gear and left for L.A. Sunny morning, still, clear. We brought all specimens to the lab for study.

3.0 mi. N. Mojave, Kern Co. 3100 ft. California

13 April 1630 Howard McElderry and I (and Baron) finally left L.A. and arrived this locality 1800. Purpose of trip is to increase sample size from this locality. Set out 170 traps in 4 lines as below:



# Journal

Hafner, M. S.
1975

3.0 mi. N. Mojave, Kern Co. 3100 ft. California

13 April (con't) We finished setting traps ~1900. There was a slight breeze and it began to cool off as the sun set. We ate hot-dogs and had some beer then crashed about 10 PM. Windy all night – not especially cold (~ 40° F).

14 April 3.0 mi. N. Mojave, Kern Co. 3100 ft, California
0645 - awoke and checked traps with following results:

35 *Dipodomys merriami*
7 *D. panamintinus*
22 *Perognathus longimembris*
4 *Neotoma lepida*
1 *Ammospermophilus leucurus*
6 *Onychomys torridus*
19 *Peromyscus maniculatus*

Success = 94/170 ≐ 55%

The morning was cool and somewhat windy. We released the *Peromyscus* and *Neotoma* and returned all the ~~Hetero~~ ms A. heteromyids to the lab for study. I brought back the *Onychomys* to send to Dr. Baker at Texas Tech. (Upon return to the lab, 1 *Dm.* ♀ had given birth to 2 young.) 0900, headed for Los Angeles

# Journal

Hafner, M.S.
1975

5 mi. E. California City, Kern Co., 2500 ft. California

16 April 1200 – Roland Leong (and Barron) and I left L.A. and arrived this locality ~1630. Slight rainfall as we passed through Mojave; Dark clouds remained over the Tehachapi's. We set out 169 traps in 4 rows from camp. Scattered Larrea, Atriplex, and many dried stalks of ~~Sava~~ "Squaw Cabbage" from a few seasons past. Light breeze. ~50°F.

1830 – walked around and checked out several old mine-shafts (vertical) – none too recent.

2030 – light rain – past fairly soon.

17 April 0700 – Arose to light breezes – not too cool. Checked traps with following results:

| | |
|---|---|
| 1 | Ammospermophilus leucurus |
| 1 | Peromyscus maniculatus |
| 30 | Perognathus formosus |
| 11 | Perognathus longimembris |
| 6 | Dipodomys merriami |
| 2 | D. panamintinus |
| 6 | Onychomys torridus |

Success = 57/169 = 33.7 %

Returned all animals except A.l and P.m to lab for seed cache studies.

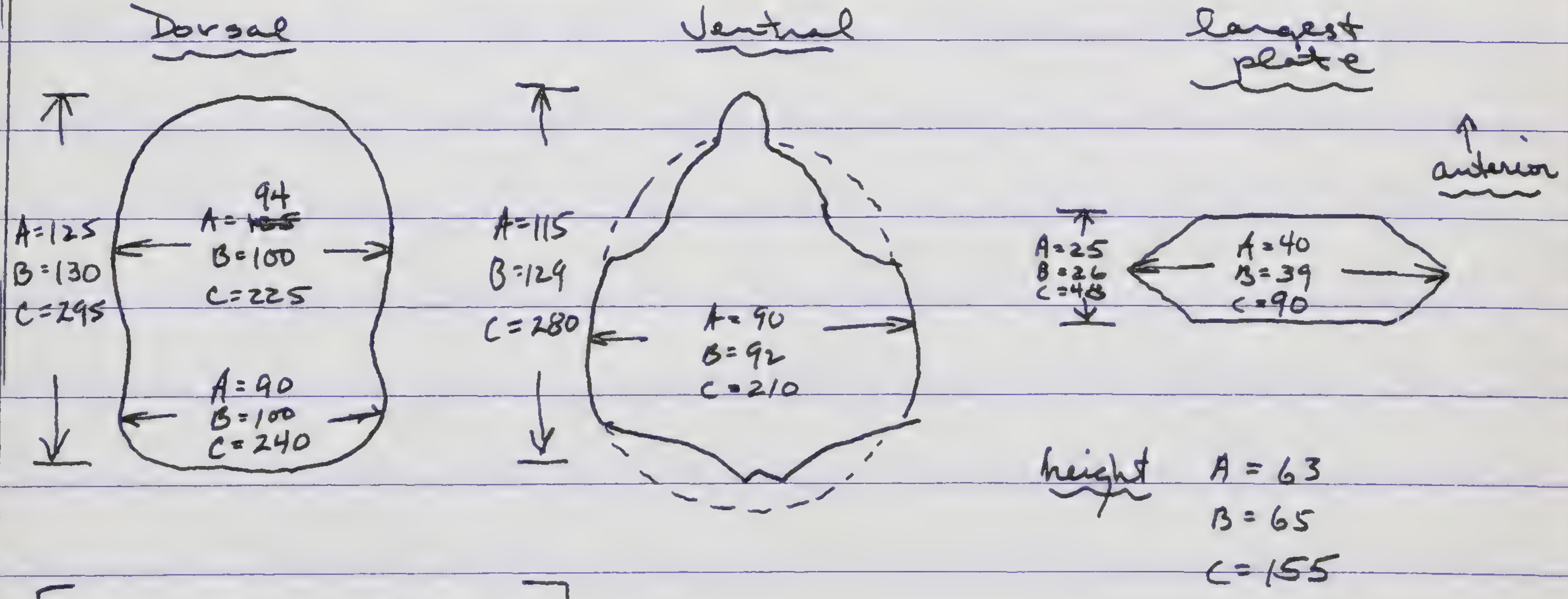
0830 – departed locality for Los Angeles.

Journal

Hafner, M.S.
1975

2.6 mi. S., 6.3 mi. W Randsburg, Kern Co., 2900 ft. California

19 April 1400 - Darcey, Barron and I left Los Angeles and arrived this locality ~ 1730 - We almost got stuck in wet sand on the dirt road heading S. from the Garlock area. Found 2 Tortoises (Gopherus), both sub.ad. size. [I brought these back to the lab for urine analysis by S. Chaplin.] Tortoises were about .25 mi. apart, by dirt road ~ 2 mi. S of Garlock highway. (very near edge of Koehn Dry Lake). 1730 - We set out ~160 traps in 4 directions from camp. Found an adult Tortoise near camp. Measurements of Tortoises as follows:




[A = sub ad. ♀ = 470 gm
B = sub ad ♀ = 475 gm
C = ad ♂ = 5.6 kg.]

Calm evening. Clear. ½ moon.

2.6 mi. S., 6.3 mi. W. Randsburg, Kern Co., 2900 ft. California

20 April 0630 - Awoke to a very nice day and checked traps with following results:

# Journal

Hafner, M.S.
1975

2.6 mi. S., 6.3 mi. W. Randsburg, Kern Co. 2900 ft. California

20 April [con't] Results: 13 *Perognathus formosus*
6 *P. longimembris* (1 torpid)
10 *Dipodomys merriami*
1 *Ammospermophilus leucurus*

Success = 30/160 = 18.7%

This is the second trapping night at this locality and we have caught no *Peromyscus*; and both times, a Kit Fox has bothered our traps (the feces of the Fox were noted to contain live parasitic worms of some type).
1000 - After lying in the sun for awhile and re-measuring the vegetation density, we departed the locality. We drove NE on the dirt road which finally took us back to the highway. [We did not use the road that we came in on due to the sandy area we barely escaped from yesterday.] We noted one more medium sized Tortoise along the dirt road as we drove out.

2 mi. E. Searles Station, 9 mi. NNE Johannesburg, 3200 ft, San Bernardino Co., California.

25 April Darcey, Barron and I arrived here 1700 and I set out 166 live traps east of Camp. D. Hafner arrived from New Mexico 1830 and we set out 234 of his traps west of camp 1. Windy night, full moon.

Journal

Hafner, M. S.
1975

2 mi. E. Searles Station, 9 mi. NNE Johannesburg, 3200 ft.
~~Kern~~ San Bernardino Co., California.

26 April. 0700 arose to a bright, windy day. Checked traps with following results:

129 *Perognathus longimembris*
16 *P. formosus*
30 *Dipodomys panamintinus*
11 *D. merriami*
21 *Onychomys torridus*
2 *Ammospermophilus leucurus* (1 ad, 1 juv.)
1 *Peromyscus maniculatus*

Success = 210/400 = 52.5%

While checking traps, I noted a small *Sceloporus* lizard impaled on a *Larrea* twig, obviously the work of a Shrike (*Lanius*). Dave captured a rather long (~1 meter) Gopher snake (*Pituophis*). Saw numerous Whiptail lizards (*Cnemidophorus*). Dave and I dug up several *Dipodomys* burrows, but only 1 was a real nest burrow. (Dm ♂). [Picture on next page]. While digging the burrow a very large (~110 mm.) Centipede crawled up Dave's pant leg. Luckily, he wasn't bitten.

1400 – We organized the animals – I took back all Dipo's and Dave took back (to N.M.) 2 of each species. We then departed via US 395 and 14 to Walker Pass to trap a *Dipodomys panamintinus* locality.

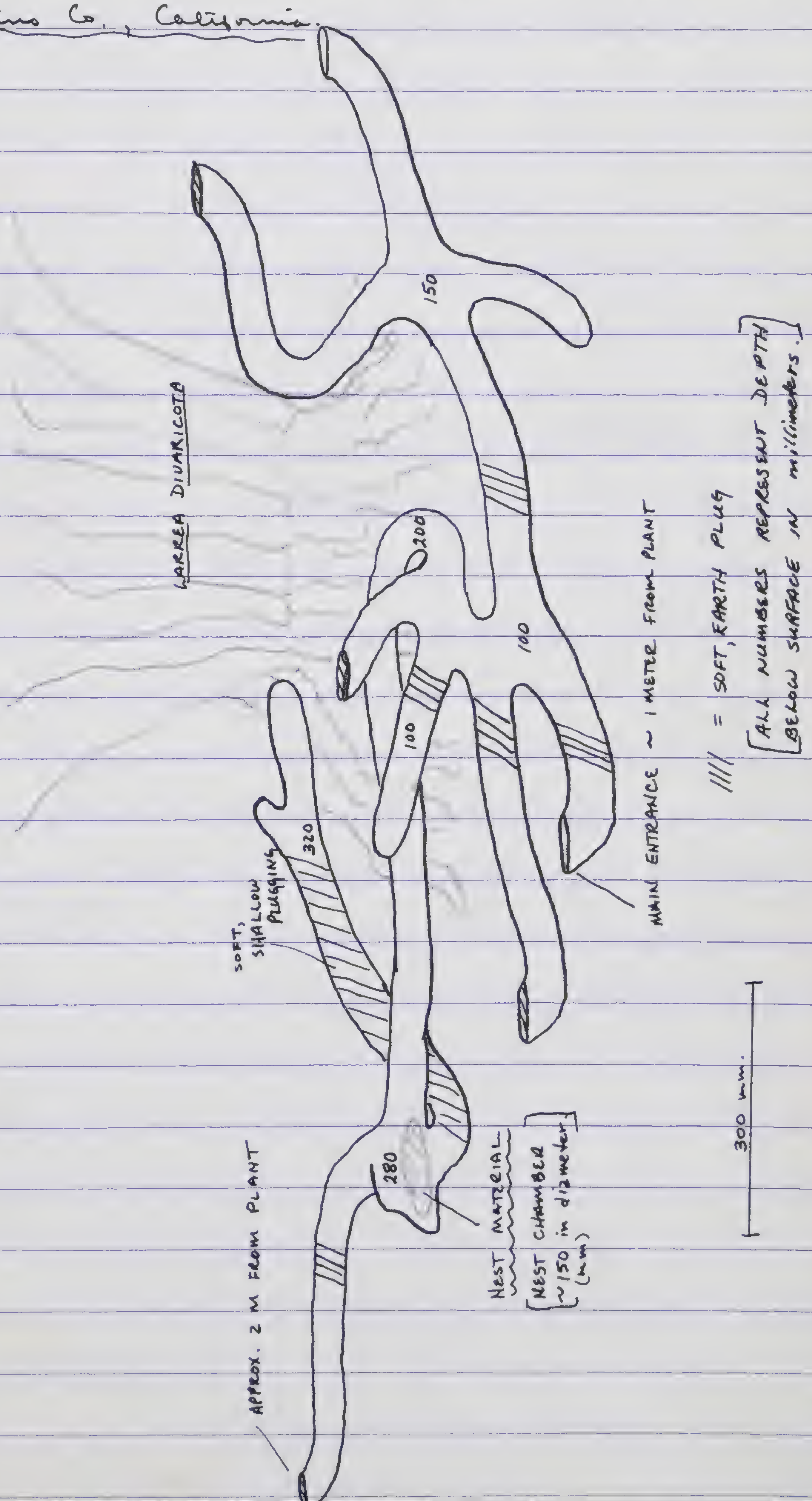
# Journal

Hefner, M.S.
1975

2 mi. E. Searles Station, 9 mi. NNE Johannesburg, 3200 ft.
San Bernardino Co., California.

27 April

*Dipodomys merriami* ♂



Journal

Hafner, M.S.
1975

Various locales through Walker Pass, Kern Co., California.

26 April (con't) 1700 - Arrived in Freeman Canyon (Walker Pass) and set out 100 live traps approx. 3.9 mi. from the Summit. This locality had thick clumps of Joshua Trees (*Yucca*), and a species of *Atriplex* (spinosus?) was the dominant shrub. There were a few *Chrysothamnus* bushes with very-few *Larrea*. Fine sand to sandy gravel. Dave noted a large *Buteo* (Red-tail? or Rough-legged?) nearby.

We drove to Walker Pass summit (5240') where we set 100 traps .15 mi. E. of Summit. This locale was on a sloping hillside S. of the highway. Few Piñon Pines, mostly *Artemisia tridentata*. Fine to coarse sand.

1800 - Drove to a point ~1.1 mi. by road from the Summit (E. of summit) where we drove off the road to the South and set 60 traps in a predominantly *Artemisia tridentata* - ~~*Atriplex*~~ community. There were a few *Chrysothamnus*, ~~few~~ Fine to coarse sand. Clumps of *Yucca brevifolia* surrounded the field in which we set our traps. Very windy evening. Cold. Full moon rose ~2100.

27 April Various locales through Walker Pass, Kern Co., California

~0700 - Arose and checked traps:

0.15 mi. E. of Walker Pass Summit, 11 mi. W. Inyokern, 5100 ft. Kern Co., California.

12 *Peromyscus maniculatus*

4 *P. boylei*

Journal

Hafner, M. S.
1975

Various locales through Walker Pass, Kern Co., California

27 April [con't]

Results: [con't]

5 P. truei

7 Dipodomys panamintinus

3 Perognathus (longimembris) [1 large ~15 gm, 2 small ~7 gm]

Success: = 31/100 = 31% [large species is P. xanthonotus]

2nd locality: 1.1 mi. by road, E. of Walker Pass Summit, 10 mi. W of Inyokern, Kern Co, 4700 ft., California.

9. Dipodomys panamintinus

12 Peromyscus maniculatus [3 juv., 9 ad.]

2 P. boylei

1 P. truei

2 Perognathus (longimembris) [1 large ~15 gm, 1 small ~7 gm]

Success = 26/60 = 43.4 % [large species is P. xanthonotus]

3rd locality: 3.9 mi. by road, E. of Walker Pass Summit, 9.2 mi. W. of Inyokern, 4400 ft. Kern Co., California.

10 Peromyscus maniculatus

2 P. boylei

1 P. truei

1 Neotoma lepida

1 Onychomys torridus

5 Perognathus longimembris [all small ~7 gm.]

1 Dipodomys merriami

1 D. panamintinus

# Journal

Hafner, M.S.
1975

Various locales through Walker Pass, Kern Co., California

27 April (con't) Results: (con't)

1 *Spermophilus beecheyi* (juv.)

1 *Ammospermophilus leucurus*

Success: 24/100 = 24 %

I brought back all *D. panamintinus* for lab work [and 20 *Peromyscus maniculatus*] [We noted many Gopher (*Thomomys*) diggings at every locality]

1000 – We drove to Mojave and had breakfast. David left Mojave at 1130 – and we headed for L.A. later.

Various Locales, N.E. & N.W. Mojave Desert, California

31 April I left L.A. 0645 and drove to each of the 7 localities (for my master's Project). I measured soil compactness and soil color. Arrived back in Los Angeles 1730.

17 August Various localities s. of Corral Hollow Rd. [7 mi. S., 1 mi. W. Tracy, San Joaquin Co., California]

1000 Arrived this locality with Brothers John and David Hafner and Ken Raney. Hiked southeast of main road to [perhaps not?] [lone-tree Creek.] Noted many signs of *Dipodomys* and *Perognathus* burrows on sparcely vegetated hilltops along the way. Warm, windy day.

Journal

M.S. Hafner
1975

Various locales S. of Corral Hollow Rd., 7 mi S., 1 mi W
Tracy, San Joaquin Co., California.

17 August [con't] We noted 1 golden eagle, 1 red-tailed hawk and several mourning Doves. In Lone-tree canyon we collected Uta stansburiana and Sceloporous occidentalis for a possible study into the ecological separation between the genera in the chapparal habitat. Actually no specimens of S. occidentalis were collected this trip, but D.J.H. had collected several on a previous trip. A total of 16 Uta were collected (and 18 total sightings.). Noted large ♀ Sparrow hawk on ~~one~~ south ridge of canyon. J.C.H. found the ~~lower~~ right dentary of a pig (Sus scrofa) on the South hillside of Lone Tree Canyon. Found dentary of house cat (Felis) in ravine near Corral Hollow road on return to car. No sightings of Sceloporous this trip.

20 August Various locales S. of Corral Hollow Rd., 7 mi. S., 1 mi W.
Tracy, San Joaquin Co., California

Ken Ramsey and I left Pleasant Hill at 1400, arrived here 1500. Warm (hot) day, moderate breeze from SW. We hiked South from the road over some rocky hilltops to the small canyon where we had previously captured Uta.

Journal

Hafner, M.S.
1975

Various locales S. of Corral Hollow Rd., 7 mi. S, 1 mi. W of Tracy, San Joaquin Co. California

20 August (cont.) As we crossed a small gully near the top of the hills, a large Bobcat (Lynx rufus) fled from within the canyon (gully) to the higher hills to the south of us. - A very light-colored cat, but quite large. A golden Eagle (Aquila) ♂ flew overhead as we entered the study area. Also noted several ground squirrels (Spermophilus beechii) in the rocks and on the barren hillsides of the canyons. I shot 15 Uta stansburiana in the rocks (and around the rocks) of the study site. These animals were tagged and saved for later stomach contents analysis, etc.. 1730 left study area. Noted ♀ sparrow hawk (Falco) on the rocks to the NE of us as we left the study area. On the following page is a rough map of the study area. 1900 arrived Pleasant Hill, California.

# Journal

Hafner, M.S.
1975

Various locales, Corral Hollow Rd., 7 mi. S., 1 mi. W.
Tracy, San Joaquin Co., California

17-20 August — Record of captures.

| | species | number | height above ground | notes |
|---|---|---|---|---|
| 17 August | Uta | DJH — * | on fine sand —0— | ~2 cuft. rock; 60 cm from nearest rock |
| | Uta | DJH — * | top of rock 30 cm. | 3 m to nearest rock |
| | Uta | DJH — | side of rock 25 cm. | ~80 cuft. rock; nearest rock = adjacent |
| | Uta | DJH — | hard soil above rock —0— | ~30 cuft. rock; 4 m to nearest rock |
| | Uta. | DJH — | hard soil above rock —0— | ~2 cuft.; 3 m " " " |
| | Uta | DJH — * | hard soil —0— | 10 m nearest rock |
| | Uta | DJH — | hard soil of grassy hill —0— | 30 m " " |
| | Uta | DJH — * | " " " " —0— | 8 m " " |
| | Uta | DJH — * | " " " " —0— | 4 m " " |
| | Uta | DJH — * | " " " " —0— | 4 m " " |
| | Uta | DJH — * | " " " " —0— | 1 m " " |
| | Uta | DJH — | " " —0— bottom of canyon | 30 cm " " |
| | Uta | DJH — | sandy soil bottom of canyon —0— | 1 m " " |
| | Uta | DJH — | grassy hillside —0— | 1 m " " |
| | Uta | DJH — | " —0— " | 1 m " " |
| | Uta | DJH — | hard soil above rock —0— | ~12 cuft.; 3 m nearest rock |
| | Uta | DJH * | grassy hillside —0— | 20 m " " |
| | Uta | DJH — | " —0— " | 2 m " " |
| 20 August | Uta | MSH-391 | top of rock 35 cm | vol. of rock ~3 cuft.; in area of several rocks |
| | Uta | MSH 392 | on soil at top of rock —0— | vol. of rock ~3 cuft.; " " " " " |
| | Uta | MSH 393 | top of small rock in gully 20 cm | vol. of rock ~2 cuft; " " " " " |

[* Sighting only]

Journal

Hafner, M.S.
1975

Various locales off Corral Hollow Rd., 7 mi. S., 1 mi W. Tracy, San Joaquin Co. California

Record of Captures [con't]

20 August [con't]

| species | number | height above ground | notes |
|---|---|---|---|
| Uta | MSH 394 | top of small rock 30 cm | vol. of rock ~ 4 cuft. 0.7 m to nearest rock |
| Uta | MSH 395 | top of small rock 30 cm | vol. of rock ~ 3 cuft. in vicinity of many small rocks |
| Uta | MSH 396 | top of small, flat rock 5 cm. | surface of rock 4 sq.ft. nearest rock ~1 m. |
| Uta | MSH * | sandy soil near base -0- | small rock |
| Uta | MSH 397 | top of rock 40 cm | vol of rock ~6 cuft. in vicinity of many rocks |
| Uta | MSH 398 | base of rock - sany soil -0- | flat rock |
| Uta | MSH 399 | top of rock - level with soil -0- | vol. of rock ~3 cuft lizard actually on rock |
| Uta | MSH * | top of rock - level w/soil -0- | vol. of rock ~5 cuft. 6 m to nearest rock |
| Uta | MSH 400 | top of rock 30 cm | in vicinity of several rocks |
| Uta | MSH 401 | on soil beneath small rock -0- | vol. of rock ~ 1 cuft. |
| Uta | MSH 402 | top of flat rock -0- | surface of rock ~ 3 sq.ft. rock level w/soil - near many rocks |
| Uta | MSH 403 | " " -0- | " " " |
| Uta | MSH 404 | side of rock 40 cm | vol. of rock ~9 cuft. in vicinity of several rocks |
| Uta | MSH 405 | top of rock on soil -0- | rock level w/soil |
| Uta | MSH * | sandy soil below rock -0- | (flat rock) |
| Uta | MSH * | top of rock 30 cm | ~ 3 cuft. rock |
| Uta | MSH * | top of rock on soil ~~30~~ -0- | rock level w/soil |
| Uta | MSH * | top of rock 40 cm | ~6 cuft. rock 1 m to next rock |
| Uta | MSH * | soil near rock -0- | in gully. |

[* sighting only]

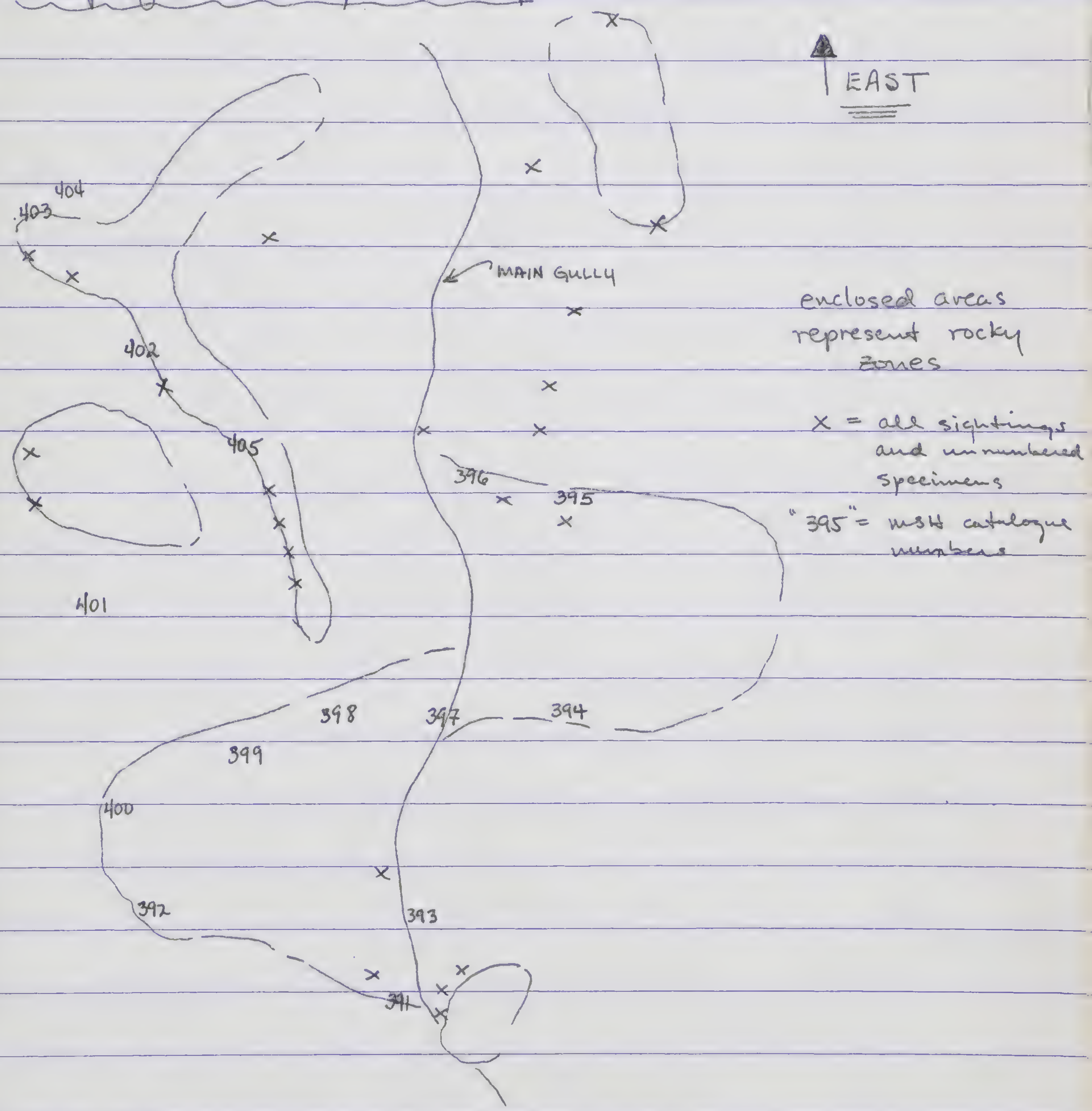
Journal

Hafner, M.S.
1975

S. of Corral Hollow Rd., 7 mi. S., 1 mi. W. Tracy, San Joaquin Co., California

20 August [con't]

Map of collecting locality



# Journal

Hafner, M.S.
1975

12.7 mi. N. Nixon, Washoe Co. Nevada.

3 September 0800 Ken Ramey and I (and dog ~~Baron~~ "Baron") left Pleasant Hill, California - Drove via Sacramento, Truckee and Reno to Pyramid Lake, Nevada. Warm day, calm. Drove on the west shore of Pyramid lake through Sutcliffe to a point 13.6 mi. N. Sutcliffe. We could find no town of Pyramid, only a ranch on a small stream about 11 mi. N. Sutcliffe. We set 60 traps in the sandy soil on a small plain to the right (E) of the road. This area had originally been under water, the present shoreline was approximately 0.5 mi. away. (Habitat to be described later.). The ground was covered with millions of tiny sea shells, none larger than approximately 6 mm. We noted several Zebra-tailed Lizards and one specimen of Cnemidophorus. We drove south on the same road, past the ranch to a point 9.4 mi. N. Sutcliffe where we stopped and set 40 traps again to the east of the road. This area was also once under water and was now loose sand. This and the above locality were (and are) being grazed by cattle. An indian in an official truck stopped to see if we were in trouble. We asked if he knew of a town called Pyramid. He didn't. We continued south

Journal

Hafner, M.S.
1975

12.7 mi. N. of Nixon, Washoe Co., Nevada.

3 September [con't] on the road, through Sutcliffe to a point approximately 5 mi. W. of Nixon. This area was at the immediate South tip of the lake about 0.5 mi. from shore. (Habitat to be described below). We set 30 traps + 2 live gopher traps. We proceeded through Nixon to a locality 8.6 mi. N. Nixon (8.6 mi. by road (Hwy 34)) and set 40 traps in the sand dunes to the East of the highway. J.C. Hafner, D.J. Hafner and I had set at this exact locality in March of this year. We had captured only 1 Microdipodops at that time (100 traps). We then proceeded further north on Hwy 34 to a point 12.7 mi. (by road) N. of Nixon where we turned off on a dirt road and headed toward Winnemucca Dry lake. We camped about 0.3 mi. (West) from the barren lake bed and set out 40 traps. The night was very still and not too cold ~40° F. We arose at 0600 the next day.

4 September Various locales around Pyramid Lake, Washoe Co, Nevada.

0600 The locality at camp was of fine, sandy soil, dark grey in color. The vegetation was medium to dense (Sarcobatus ?) with occasional bushes reaching 1 meter diameter.

Journal

Hafner, M.S.
1975

Various locales around Pyramid Lake, Washoe Co., Nevada.

4 September (con't) There were occasional open spaces lacking any vegetation. Many signs of *Dipodomys*.

Exact locality:

12.7 mi. N. Nixon, 0.5 mi. E of Hwy 34, Washoe Co. Nevada.

Results: 5 *Dipodomys merriami*
1 *D. panamintinus*
2. *P. maniculatus* (1 juv.)

We proceeded from here to the next locality:

8.6 mi. (by road) N. Nixon, Washoe Co., Nevada.

Results: 1 *D. ordii*
1 *Microdipodops* sp.
1 *Ammospermophilus leucurus*

The habitat at this locality was fine wind-blown sand on a gently sloping hillside. Mostly *Atriplex*. Sparcely vegetated.

We drove through Nixon to the next locality:

5.4 mi. (by road) West of Nixon, Washoe Co, Nevada.

Results: no gophers (one trap buried)
3 *D. panamintinus*
5. *D. ordii*

Habitat was loose with occasionally packed sand. Widely spaced (*Sarcobatus*)?, near shore of lake.

Journal

Hafner, M.S.
1975

Various locales around Pyramid Lake, Washoe Co., Nevada

September (con't) We proceeded North to the next locality:

9.4 mi. N (by road) of Sutcliffe, Washoe Co., Nevada

Results: 4 D. panamintinus

3 D. ordii

Habitat of fine sandy soil, occasionally packed. Approximately 0.2 mi. from lake shore. Sparce Sarcobatus. Drove north to last locality:

13.6 mi. (by road) N. Sutcliffe, Washoe Co., Nevada

Results: 4 D. panamintinus

4 D. merriami

1 Spadefoot toad (Scaphiopus)

Habitat was fine sand with occasional packed areas. Artemisia and Sarcobatus moderately dense in places. Approximately 0.5 mi. from lake.

As the purpose of this trip was to catch Microdipodops, we were rather disappointed. We did catch the one specimen north of Nixon. We released all animals except the Micro., Ammo. and toad. We drove south towards Sutcliffe after eating a little breakfast at the last locality.

1000 sighted a Prairie Falcon approximately 9 mi. N. Sutcliffe circling over the road.

Journal

Hafner, M.S.
1975

Various locales around Pyramid lake, Washoe Co., Nevada.

4 September [con't] The Prairie Falcon disappeared in the rocky cliffs to the west of the road. We proceeded south and stopped at the historical marker indicating where the Pyramid Lake Battles had occurred in 1860. We drove into Wadsworth and stopped to look at indian artifacts and antiques. Got fuel in Fernley, Nevada and drove from there via Hwy 80 to Lovelock, Nevada. Bought beer in Lovelock, noted the post office where we will meet JCH and DJH tomorrow, and proceeded west from Lovelock towards "7-Troughs" and Vernon. Very warm day. Drove out the road to Eagle Picher mine, but found no suitable habitat for trapping. Returned to main road and continued through the Trinity Range to the Vernon cutoff (all dirt and gravel roads). Road paved as far as Eagle Picher mine turnoff. Drove through a wide valley and stopped at an old, broken-down adobe house to the S. of the road. The car was getting overheated at this point so we stopped at looked at the ruins. The house was about 20 x 20 feet and

Journal

Hafner, M.S.
1975

26 mi. W. and 14 mi. North Lovelock, Pershing Co., Nevada 4100 ft.

4 September (con't) about 10 feet high. (3 rooms). We returned to the road and continued driving ~~SW~~ NW. into the Seven Troughs Range. Although the road signs pointed toward Vernon, we could not locate the town. As we drove into the Seven Troughs Range the car was becomming very overheated. We were forced to turn around and coast down the hill, hoping to find water at an old well we had passed. Of course the well was empty although the windmill was still turning. We let the car cool down then attempted the climb again. The car was again extremely overheated but we finally reached the summit and the car cooled as we went down the west slope of the range. We passed a very nice ranch house to the immediate N. of the road. (The Ranch had a very large pond beside it.) We drove to floor of the valley and turned S on a road heading toward the large dry lake (between the Seven Troughs Range and the Sahwave Mountains). We could only go about 1 mile down the road before the rocks and overheating car forced us to stop. We set up camp and explored the area. A very small dry lake bed

# Journal

Hafner, M. S.
1975

4100 ft.

26 mi. W., 14 mi. N. Lovelock, Pershing Co. Nevada

4 September (con't) lied to the West (about 0.5 mi. from camp.). The habitat was mainly Atriplex with occasional shallow, sandy washes. Many gravelly areas. Didn't look too good for Microdipodops, but the overheated car couldn't be pushed much further today. We set out all 210 traps in several lines from camp. Had hot-dogs and beer for dinner. Very nice evening. Warm with a light NE'ly breeze. We noted several leopard and Zebra-tail lizards in the late afternoon.

5 September 26 mi. W., 14 mi. N. Lovelock, Pershing Co. Nevada

0630 arose and checked traps:

6 Dipodomys microps
3 D. merriami
3 Microdipodops megacephalus
8 Perognathus longimembris
2 Onychomys (torridus)?
1 Ammospermophilus leucurus

We kept the micros., 2 P. l., and 1 O. t. (+ the Ammo.). 0830 headed back towards Lovelock. The car had no difficulty climbing the mountains, and we ate breakfast at the top. We con't. back to Lovelock as we entered the town we noted a Red-tailed Hawk and a Loggerhead

# Journal

Hafner, M.S.
1975

Lovelock, Pershing Co., Nevada.

5 September (con't) Shrike perched on poles along the way. We had coffee in a small cafe and waited on the lawn beside the Post Office for a couple hours.

1300 - John and Dave Hafner drove into town in the Datsun Station wagon. We ate lunch, got fuel and headed NE on 80. We drove to a point about 7 mi S. of Winnemucca where we set out 100 traps in fine, sandy soil. Brush was rather thick in this area. We continued north and turned due ~~north~~ on Hwy 95. We set out 160 traps in fine sand dunes about 7 mi. North of Winnemucca. We then continued north turning NW on Hwy 140 to just S. of Denio, Nevada. Very warm day. We noted a Prairie Falcon and Golden Eagle on poles along Hwy 140. We stopped on the road approximately 20 mi S. Denio to observe 2 Rattlesnakes (diamondback - Crotalus) crossing the road - The snakes were actually about 2 miles apart on the road - both were adults 35-40 cm. We set 100 traps 5 mi. S Denio and 170 traps 0.6 mi S. Denio. The ~~sat~~ sun was down before we finished setting. 1 gopher trap was set at the latter locality. We camped 5 mi. S Denio.

# Journal

Hafner, M. S.
1975

<u>Vicinity of Denio, Humboldt Co., Nevada</u>

5 September (con't) We enjoyed beer, beans, and bologna sandwiches. 2130 we noted a wierd light-colored spot in the SW sky. It appeared high in the sky as a light, foggy spot. We could see stars through the spot. It was continually growing in diameter until it covered about 1/5 of the entire sky. It eventually faded away. We felt that this spot was perhaps related to the atomic test held in S. Nevada this morning. We finally got to bed about 0130. Beautiful, clear night. We slept out on a tarp.

6 September <u>Vicinity of Denio, Humboldt Co., Nevada.</u>

0630 Arose and checked nearby localities:

<u>5 mi. S. Denio, ca. 4300 ft. Humboldt Co. Nevada.</u>

<u>0.6 mi. S. Denio, 4200 ft. Humboldt Co., Nevada.</u>

0830 We continued S. on 140. Noted <u>Golden Eagle</u> and <u>Prairie Falcon</u> once again. 1000 arrived at Winnemucca localities and checked traps with following results:

Journal

Hafner, M.S.
1975

Vicinity of Winnemucca, Humboldt Co., Nevada

6 September (con't.) results:

7.0 mi. N Winnemucca, 4600 ft., Humboldt Co. Nevada.

Get results from DJ - JC

5.5 mi. S. Winnemucca, 4300 ft. Humboldt Co., Nevada

J.C. Hafner found what appears to be the dentary of an *Antilocapra* at this last locality. "Dune Buggies" at the 1st locality had destroyed 3 Sherman traps.
1130 ate breakfast at the truck stop ~4 mi. S. Winnemucca. We then re-distributed the animals (*Micros* to J. and D. and *Perog.* to me.). John and I road together in the Mazda to allow some time to talk over the Accipitrid Paper currently in progress. Ken and Dave were in the Datsun. We headed S. on US 80 to the turnoff to Fallon. Dave's car was apparently having radiator problems making the trip slow and hot. At the turnoff to Hwy 95 we split-up once more: Dave and John headed S. to trap in Deep Springs

# Journal

Hafner, M.S.
1975

Vicinity of Winnemucca, Humboldt Co, Nevada

6 September (con't) Valley, Inyo Co., Calif for one night before heading back to Albuquerque. Ken and I headed back to Pleasant Hill. Very warm trip home via Truckee, Sacramento and Martinez to Pleasant Hill.

P.S - I received my Nevada permit. Good from July 1975 - July 1976. 16 Sept.

Dear Mark:

Here are the trapping localities. Sorry for the delay.

Dave and I karyotyped all the Micros last weekend. Hard work for two days; we karyotyped about 50 Micros. All slides were fantastic! We took a cursory glance at them and found no more variation. We did catch 2 species at that one locality (NE Hot Creek); we have all 4 races of pallidus. That Nixon fellow turned out to be a pallidus. over

Sagehen Creek, 3.0 mi. NW Hobart Mills, Nevada Co., 6300 ft., California

17 October

17 October 1000 left MVZ with mammalogy class and drove via Sacramento and Truckee then north on Hwy 89 to this locality. 1530 Set out 25 museum special traps, 5 Victor snap traps and 6 sets of MacAbee gopher traps. All snap traps were placed

the ones from NW of Lovelock were megacephalu[s]
as were the Winnemucca Micros. The Utah
Micros were, unfortunately, megacephalus. It
irritates me to find E.R. Hall to be correct!

We did not take blood from any Micros
this time. We're saving the tissue though.

It would be fantastic if we could include
the electrophoresis data with the karyotype stuff.
Keep working on it! Dave should send to you
the botanical specimens from the hybrid zone.

Say hi to Darcey + ? Love, John.

Journal

Hafner, M.S
1975

Sagehen Creek, 3.0 mi. NW Hobart Mills, Nevada Co., 6300 ft., California

17 October [con't] on rocky hillside 0.5 mi. SE of Sagehen station. (Arctostaphylos dominates with occasional stands of pine.) Noted Coopers hawk flying through pines just N. of the Sagehen Creek road. Sightings of several chipmunks (E. amoenus) and squirrels (C. lateralis and Tamiasciurus douglassi) in rocks adjacent to road. Weather clear — few cirrus clouds - very light NW'ly breeze.

2100 set out 1 Tommohawk live trap in pine stand 0.3 mi. NW of the station. All gopher traps set today were set near camp and adjacent to the creek. Cold night (~ 29-35°F), still, clear, Full moon.

18 October Sagehen Creek, 3.0 mi. NW Hobart Mills, Nevada Co., 6300 ft., California

0700 arose and checked traps with following results:

Snap traps:

2 Peromyscus maniculatus

1 Microtus montanus

gopher traps:

3 Thomomys monticola

P. maniculatus were captured on rocky hillside

Journal

Hafner, M.S.
1975

Sagehen Creek, 3.0 mi. NW Hobart Mills, Nevada Co., 6300 ft. California

18 October (con't) approximately 100 m from stream (Arctostaphylos association). Microtus was captured further up on the rocky hillside (actually among rocks) approximately 300 meters from stream. Gopher was captured on dirt bank immediately beside the stream. We returned to camp and put-up skins. I was given a E. amoenus to put-up (MSH 473 ♀) captured approximately:

0.5 mi. N. (by Hwy 89 rd.) of Little Truckee River, Nevada Co., 6000 ft. California

in Artemisia tridentata / Chrysothamnus nauseosus association.

1100 drove into Truckee to call Darcey. All ok. Road kills: Porcupine (no skull) and E. amoenus and C. lateralis (both skulls entirely crushed).

1500 Entire class left area to trap in desert habitat. Drove via Sierraville then on Hwy 49, through Loyalton and Vinton to a locality 1.1 mi. E of Vinton, Plumas Co., 5000 ft, California. I set out 20 live shermans and 26 museum specials, the former in the rocky butte E. of the cemetary, the latter in the Atriplex / Chrysothamnus community approximately 300 m. E. of the Cemetary. There were many signs

Journal

Hafner, M.S.
1975

1.1 mi. E. of Vinton, Plumas Co, 5000 ft. California

18 October [con't] of heteromyid activity in the fine, windblown sand. The rocky butte was full of woodrat (Neotoma) evidence, probably N. cinerea and/or N. lepida.

1800 finished setting traps and returned to Sagehen. Checked Tomahawk traps - no luck.

2130 - 3 guys and I departed camp to return to the Vinton sight. Noted several ~~deek~~ deer (O. hemionus) adjacent to road just S. of Sierraville. Camped about 1.9 mi. N. of Chilcoot in desert scrub habitat. Cold night - (25-30°F) much frost on sleeping bags. Full moon. Clear.

19 October 1.1 mi. E. of Vinton, Plumas Co., 5000 ft. California

0700 arose and checked traps:

1 Peromyscus (juv.) maniculatus (released)

Peromyscus captured in rocks of butte. Other captures included: Perognathus parvus, D. ordii, D. panamintinus, N. cinerea, and M. megacephalus. The Microdipodops (2) ~~were~~ especially interesting, being very late in the season. I was given a D. panamintinus to put up - this also being an odd capture this far north and west. The moonlight apparently

Hafner, M.S. Journal
1975

1.1 mi. E. of Vinton, Plumas Co., 5000 ft., California

19 October [con't] had adverse effect on captures. 0800 returned via Sierraville to Sagehen Creek. Put-up animals until noon. 1430 departed Sagehen Creek and returned via Truckee and Sacramento to Berkeley.

Hastings Natural History Reservation, 14 mi. SE Carmel Valley, Monterey Co. 1700 ft. California

21 November 0930 Departed MVZ and drove via Hwy 101 S to Salinas, then west on 68 to the Carmel Valley Cutoff (~10 mi. W of Salinas). Drove SE from Carmel Valley on G16 to the Hastings Reservation. Very nice weather, ~70°F, light breeze, few Cirrus clouds. Only ½ of the Mammalogy class has come on this trip, (= 12 people). We proceeded to set out our museum special traps in the 3 established Calhoun lines on the reservation (grassland, oak-woodland, and Chapparal). I set out 20 traps with 2 other people (= 60 traps) in the oak-woodland community south of the Davis house (on "water-tank" hill). This habitat is actually very dry and sparse for typical oak-woodland, and does not appear productive (with the exception of much gopher activity on the

# Journal

Haynes, M.S.
1975

Hastings Natural History Reservation, 14 mi. SE Carmel Valley, Monterey Co., 1700 ft., California

21 November (con't) hillside. These Calhoun lines have been set twice a year for 7 years now, and results are tabulated and specimens kept here at the reservation (Reproductive info. is taken, of course). I set 24 Sherman traps in the chapparal on the hillside directly N. of the lab. I noted very little activity — occasional Peromyscus and/or Perognathus signs (no Dipodomys). Returned 1600 and set 20 Shermans near small creek (dried up the next day) behind main barn. 1630 set 6 gopher traps in meadow N of the lab. 1800, ate very nice dinner then walked with Bill Glanz and JLP to check live gopher traps in Long Meadow. Caught 1 *Thomomys bottae*. 2100 checked my chapparal set North of camp. (Captured: 1 *Perognathus californicus*

1 *Peromyscus truei*

1 *P. maniculatus*

Reset traps and returned to the camp. Played Ping-pong with J.L.P. — 3 games with close scores — he won 2 out of 3.

2300 — crashed — very cold night (~30°F) full moon rose 2030.

# Journal

Hafner, M.S.
1975

Hastings Natural History Reservation, 14 mi. SE
Carmel Valley, Monterey Co., 1700 ft., California

22 November 0700 arose – had French Toast and sausage then
checked Chapparal Line. Luis Baptista
and his class (~8 people) from Occidental
College arrived late last evening on a "Natural
History Field Trip". His class went along with
me to check my set. (Of course) I had poor
results: 1 *Reithrodontomys megalotis*
1 *Peromyscus maniculatus*
The *Reithro.* was deep into the Chapparal.
The *P. maniculatus* was ~10 M from the
Chapparal - Grassland interface.
0900 Checked gopher traps:
1 *Thomomys bottae* (large ♂)
[No captures in the creek set].
Put up skins in the A.M. Listened
to Cal-Stanford game in early P.M. Set
out 12 "Young" live squirrel traps near fallen
logs by barn (saw much *S. beechyi*
activity). 1600 checked squirrel traps –
no captures. Checked gopher traps – no
captures.
1700 - JLP and a few other people and I
set out 3 mist nets over a small water
hole near camp. Immediatly after sunset

# Journal

Hafner, M.S.
1975

Hastings Natural History Reservation, 14 mi. SE
Carmel Valley, Monterey Co., 1700 ft., California

22 November (con't) we noted a bat flying nearby. The bat was caught momentarily in the net and JLP was in the water after it when it suddenly go loose. JLP's feet were soaked and the temp was now about 40-50°F. (We heard many Coyote calls as we set up the nets). Soon thereafter, we caught:

1 *Lasiurus cinereus*

1 *Myotis californicus*

No more bats were captured during the night.
22.00 I checked my squirrel traps, no captures.
Bill Glanz gave a presentation of some of his thesis work in Chile and S. California.
L. Baptista's group came over to listen.
2300 - went to sleep - very cold night ~25-30°F

Hastings Natural History Reservation, 14 mi. SE of
Carmel Valley, Monterey Co., 1700 ft. California.

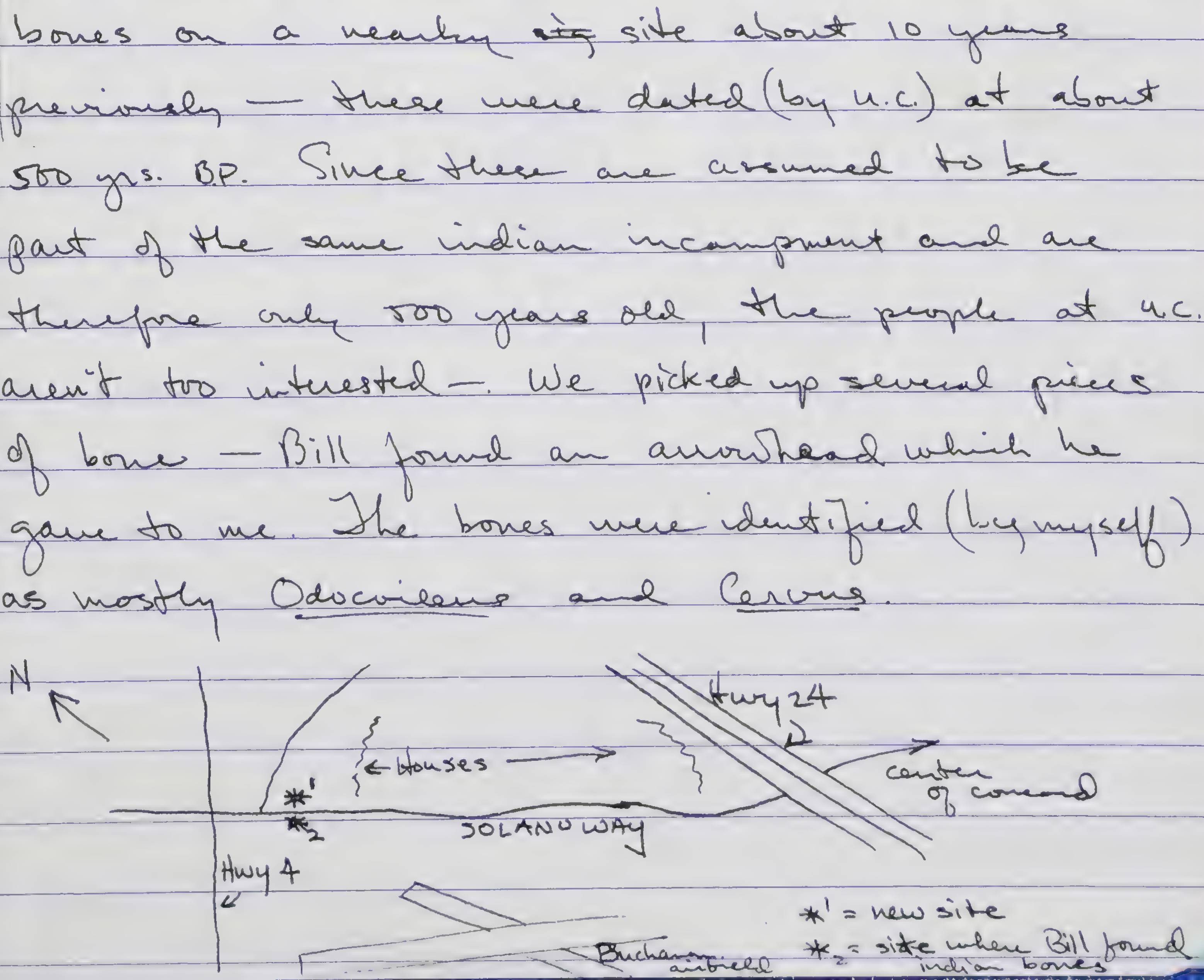
23 November 0700 arose and checked Oak-woodland Calhoun trap line - no captures - noted several deer in Oak forest SW of Davis' house. Checked and brought in squirrel traps. I saw much *Spermophilus beecheyi* activity, but no captures.
1230 - Began clean-up. 1400 departed Reservation and returned via Salinas and San Jose to MVZ.

Journal

Hafner, M.S.
1975

Concord, Contra Costa Co., 400 ft. California

28 December 1400 Learned of Costanoan Indian midden sight near present day Buchanan Airfield. {William L. McNeil}. Bill and I looked through part of large pile of soil dug from about 2 meters below the surface by "Back-hoe" the week before. Bill had notified Prof. Savage of U.C. of the find (made by one of Bill's students actually). Savage and 2 grad. students came to the area and collected for a few hours. There appears to be no effort on Savage's part to preserve the ~~sight~~ site. Bill had found Indian bones on a nearby ~~city~~ site about 10 years previously — these were dated (by U.C.) at about 500 yrs. B.P. Since these are assumed to be part of the same indian incampment and are therefore only 500 years old, the people at U.C. aren't too interested — We picked up several pieces of bone — Bill found an arrowhead which he gave to me. The bones were identified (by myself) as mostly Odocoileus and Cervus.

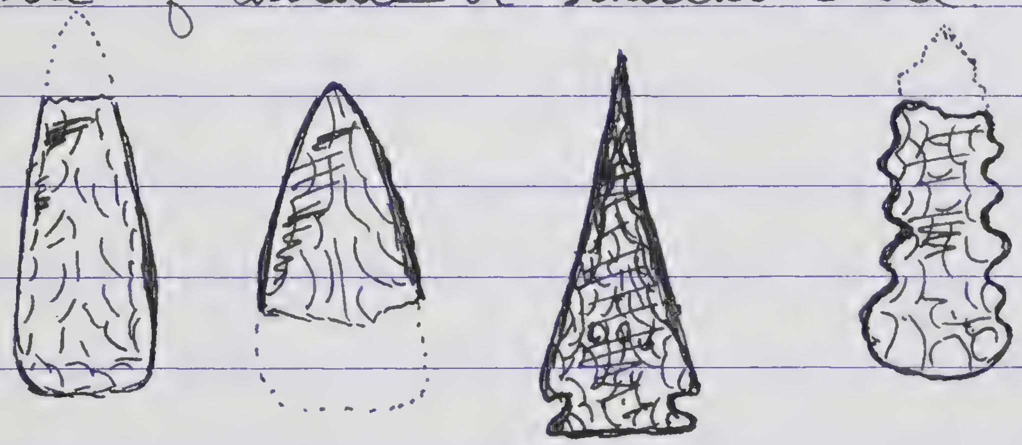


# Journal

Hafner, M. S.
1975

Concord, Contra Costa Co., 400 ft. California

29 December 1300 Ken Ramey and I arrived at the site near Concord — we dug 'till about 3 — I took Ken to school (wrestling practice). I returned. Soon, Thereafter, I found a large fragment of Beaver (Castor) dentary with 2 molars. Later I found a total of 3 arrowheads — 1 in perfect condition. I also found an awl-like instrument + an un-identifiable fragment of a tool made of ivory, and a piece of triangular shaped jewelry made of abalone or similar shell.



actual size and approximate shape of points found.

I noted a Belted-Kingfisher in a nearby tree and watched it dive after prey into a nearby pond. I picked-up several more pieces of elk bone — many bird limb bones, a dentary of a Spermophilus (probably beecheyi) and many fish bones. The pile of dirt was also laden with fragments of mussel shells.

1700 - Returned home to wash and examine findings.